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United States
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August 1986

Feed

Situation and Outlook Report

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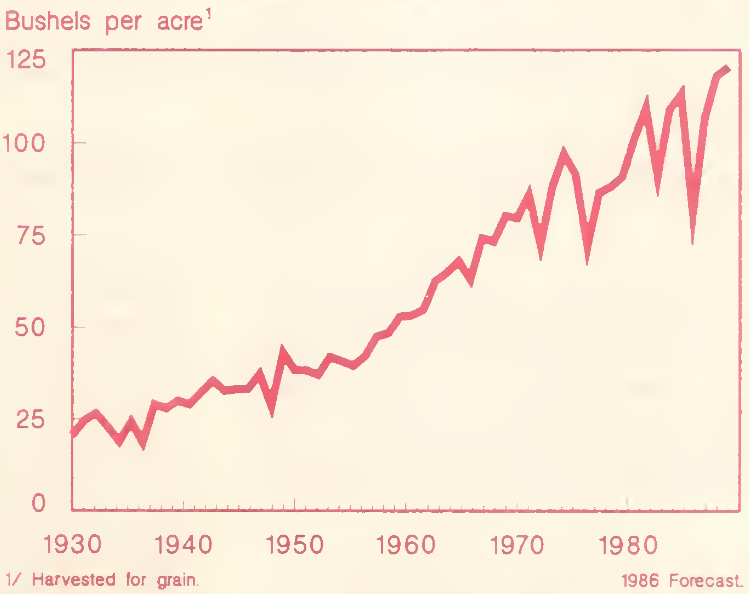


Corn Yield Continues Long Upward Trend

1/ Harvested for grain.

1986 Forecast.

300th
ISSUE

year supply. Large stocks will continue to hold down corn prices beyond 1986/87 unless a crop disaster or other unforeseen event cuts world grain supplies.

Although corn stocks on June 1 totaled 5 billion bushels, free stocks were tight relative to projected summer use. However, the $1.3 billion in in-kind generic commodity certificates issued in the first half of the summer allowed market access to much of the inventory normally isolated from the market. By August 13, 162 million bushels of corn under loan had been exchanged for certificates. With 32 million bushels acquired from CCC, 194 million have been made available to the market through certificates. Starting August 11, another $1 billion in advanced deficiency payments were made available as generic commodity certificates to feed grain, wheat, cotton, and rice program participants.

Production of all hay is forecast at a record 153 million short tons, 3 percent above 1985, while yield is forecast to reach a record 2.52 tons per acre. Roughage consuming animal units (RCAU's), estimated at 83.4 million in 1985/86, are expected to decline in 1986/87 to 80.6 million as the dairy termination program and liquidation in the beef and sheep herds continue. The supply of hay per RCAU is forecast to climb to 2.2 tons in 1986/87, up from 2.1 tons in 1985/86.

The national all hay price in July was $58.70 per ton, 14 percent below a year earlier, and the lowest July price since 1979. For the season, hay prices may average $5 to $10 below 1985/86.

FEED GRAIN SUPPLY AND USE

Feed Grain Prices Fall

Feed grain prices have fallen counter-seasonally late in the 1985/86 crop year in response to a variety of factors. Weak feed demand, slow export movement, and easing of free stocks, along with expectations of excellent 1986 grain crops, have led to price declines since late June. Although lower prices were expected because of large supplies, stagnant world demand, and a dramatic lowering of 1986 price support loan levels, declines of the magnitude experienced this summer were not anticipated until peak harvest time for corn and sorghum.

The massive placement of grain in Government loan programs portended tightening of free supplies of corn and sorghum. Over 3 billion bushels of 1985-crop corn and 355 million bushels of sorghum have been placed under loan. On June 1, free stocks amounted to only 840 million bushels of corn and 20 million of sorghum. These free stocks were tight relative to expected use. However, a number of programs have facilitated movement of grain out of Government-owned, farmer-owned reserve (FOR), and Government loan categories.

Farmers participating in 1986 feed grains and wheat programs have twice been offered in-kind generic commodity certificates (GCC's) for partial coverage of advanced deficiency and diversion payments. GCC's were first issued soon after program signup in May, with a total face value of roughly $1.3 billion. Then, early in May, the Department of Agriculture announced a program to assist fuel ethanol plants by giving GCC's equal in value to 1 bushel of grain for every 2.5 bushels used to produce ethanol from May 10 through September 30. Later in May, the rules governing the redemption and transfer of GCC's were relaxed to give farmers more flexibility in using their allotments to best advantage. Finally, an additional advanced deficiency payment was offered to participating farmers who request it, beginning August 11, to be paid in GCC's. In addition, Export Enhancement Program (EEP) bonuses are paid to exporters in the form of generic certificates.

A further easing of tight free stocks was accomplished with the announcement of an extended rotation period for corn and sorghum in the FOR. Under the relaxed rules, farmers could remove FOR stocks from storage up to 60 days before replacing them with newly harvested, purchased, or existing grain.

Because of the extra time allowed for replacement, much of the FOR grain will be available to the market before peak harvest, when free stocks may otherwise have been tightest.

Feed Grain Supplies for 1986/87 More Than Ample

Carryout of 1985/86 feed grains is projected at a record 125.8 million metric tons, about 15 percent above the previous record set in 1982/83. That year, the huge stocks turned out to be advantageous as the combined effect of reduced plantings and drought greatly reduced the 1983 crop. Although the 1986 feed grains program has helped to hold plantings to about 120 million acres, a large crop of 254 million tons is expected because of high yields in the midwest. About 83 percent (8.3 billion bushels) of the expected total feed grain crop is corn, while about 9 percent (860 million bushels) is sorghum, with the balance in barley and oats.

Growing conditions in most of the major corn producing regions have been near ideal. As the weeks passed through the first half of the summer, Government and trade estimates of the crop have edged upwards. The projected corn yield of 120.4 bushels per acre as of August 1 tops last year's record by 2.4 bushels. However, the favorable weather has not been evenly distributed. Several States in the Southeast have suffered through a long drought that has been called the worst on record. Alabama, Delaware, and Georgia, and parts of Florida, Maryland, North Carolina, South Carolina, and Virginia have been declared natural disaster areas.

On top of poor grain crops in the Southeast, hay production and pasture and forage conditions are badly affected. Thus, cattle and dairy enterprises are suffering severe feed shortages. Some of the shortages will be offset by feed cost-sharing payments that make Government grain stocks available to drought-affected livestock producers.

The drought will have only a marginal impact on the total grain crop, however, since most feed grain production is centered in the Corn Belt, Great Plains, and Lake States. The eight southeastern disaster States accounted for only about 5 percent of last year's crop.

Feed Grain Exports To Rise

Export movement in 1985/86 was the lowest of the last 10 years. Good crops in many importer as well as competitor countries caused world imports to drop almost 20 percent, and caused the U.S. share of trade to decline dramatically. Most signs for 1986/87 indicate improved demand for U.S. grain. With lower loan rates anticipated, many importers have been holding off buying until prices completely adjust.

Domestic disappearance in 1986/87 is expected to remain nearly static as feed use declines while food, seed, and industrial (FSI) use edges upward. The slight decline in feed use will likely come in spite of the abundant supplies and cheap feed prices. Major declines in dairy and hog operations will not be offset by anticipated increases in demand for feed in other livestock and poultry operations.

CORN

Record Yields; Near-record Crop

The 1986 corn for grain yield is forecast at a record 120.4 bushels per acre, up from last year's record 118 bushels despite severe drought in the Southeast. The corn crop is forecast at 8.3 billion bushels, second only to last year's 8.9 billion. The large crop comes despite a 20-percent acreage reduction and record 84-percent program signup by corn producers, which has limited expected harvested area to 69.1 million acres, 6 million below last year.

Crop conditions in the Corn Belt and Northern Plains States have been mostly good to excellent. Adequate moisture pushed crop development 12 percentage points ahead of normal during July, although some dryness affected the Delta and Central Plains States.

Forecast yields in Indiana and Iowa are up 9 bushels from last year, with every State in the Corn Belt, Northern Plains, and Lake States expected to exceed 1985 yields. Signs of drought in the Southeast are seen in expected declines in corn yields there. Virginia yields are expected to decline 60 percent from last year to 41 bushels per acre. South Carolina is nearly as low with 45 bushels per acre, a 50-percent decline. Other States from Maryland to Alabama are showing severe declines as well. However, the eight disaster States produced only 5 percent of the 1985 corn crop; thus, the national corn yield has been only marginally affected. Although production is expected below last year, the 1986/87 supply likely will be a record as a forecast record carryin of 4 billion bushels combines with the crop to achieve a 12.3-billion supply.

Growth in disappearance will not keep pace with the increase in supply. Feed disappearance is projected to exceed last year by 100 million bushels, not quite enough to offset expected declines in sorghum, barley, and oat feeding. Changes in animal-unit feed demand indicators are, on balance, negative for 1986/87 despite the precipitous drop in feed grain prices. Midyear cattle and hog inventories show the smallest herds since records were kept beginning in the early 1970's. Also, dairy cattle inventories are declining, largely due to the dairy termination program (DTP). The only sure growth market for feed appears to be in poultry production, which continues to grow 5 to 6 percent annually. However, pork production could expand in response to low feed prices particularly in second-half 1987, especially if the hog-corn ratio remains well above the low 20's.

Other domestic use is expected to increase 20 million bushels to 1,150 million in 1986/87 as demand for sweeteners, ethanol, and other food and industrial products continues to grow. The overall growth of roughly 2 percent is greatly reduced from the pace of the most recent decade as use of high fructose corn syrup (HFCS) approaches saturation for soft drinks and other food products, and as low petroleum prices and perceived quality problems for gasohol have stalled expected growth in demand for ethanol. In total, domestic corn disappearance is expected to rise 20 million bushels from 1985/86.

Exports are expected to recover quite substantially from 1985/86, as grain prices slide in response to huge supplies and reduced price-support loan rates. Although projected exports of 1,550 million bushels may be 27 percent above 1985/86, they are still the second lowest of the last 10 years. Recent cuts in expected imports by Mexico and the Middle East have been offset by an anticipated increase in Soviet imports to leave total coarse grain trade about even with previous expectations, although up sharply from 1985/86.

Oppressive Stocks Accumulate

Total disappearance of corn in 1986/87 is expected to increase by nearly half a billion bushels to 7 billion. However, with an expected 1.8-billion-bushel increase in supply, carryout will climb 1.4 billion bushels to a record 5.4 billion. At projected use rates, this amounts to more than three-fourths of a year's supply. These stocks will continue to hold down corn prices beyond 1986/87 unless a crop disaster or other unforeseen event cuts world grain supplies.

Even record participation in Government programs, and record placement of corn under loan (over 3 billion bushels of 1985-crop corn) have not been sufficient to keep farm price above loan rate in the face of large grain supplies and weak export demand and knowledge that the 1986 loan rate was reduced. At $2.35, the 1985/86 season average price is 20 cents below the CCC loan rate, and the first time since 1967/68 that the farm price has averaged below loan.

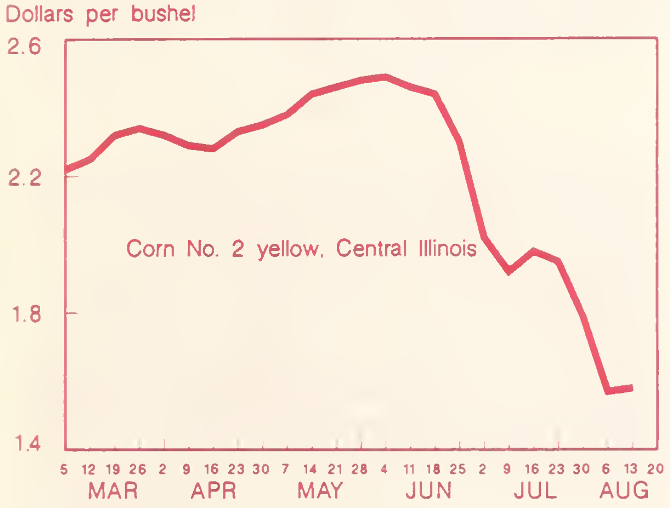
In September and October 1985, the farm price was about 20 percent below a year earlier. From November through June 1986, the farm price was higher than the October price of $2.11, and stayed between 10 and 15 percent below a year earlier. Then, in mid-July, the farm price fell to $1.99 per bushel, the first time since October 1982 that the farm price fell below $2.00.

Most of the price decline has come since the last few days of June, and continued into August. This can be seen in the changes in cash grain bids for number 2 yellow corn in Central Illinois. In the middle of June, these bids were above $2.40 per bushel. By June 30, the bids had fallen to $2.14. For most of July, the price offered was below $2.00, falling to $1.70 on July 31. These bids continued their slide, and were below $1.60 by mid-August.

Although corn stocks on June 1 were 5 billion bushels, free stocks were relatively tight. Outstanding 9-month CCC loans were 2.9 billion bushels, and FOR loans were at 523 million. With another 130 million bushels in special loans, and 551 million owned by the Government, free stocks were only 840.3 million.

These free stocks were tight relative to projected summer use. However, the $1.3 billion in issued GCC's allowed market access to much of the inventory normally isolated from the market. By July 9, 94 million bushels of corn had been exchanged for GCC's. Farmers had redeemed 78 million bushels (mostly from outstanding 9-month loans) while 16 million had been acquired from CCC. Loan redemptions kept a fairly heavy pace, and by August 13, 162 million bushels of corn under loan had been exchanged for certificates. With 32 million bushels acquired from CCC, 194 million bushels have been made available to the market by the GCC program. Certificates exchanged for corn accounted for roughly one-third of the first-issue $1.3 billion GCC availabilities. Starting August 11, another $1 billion in advanced deficiency payments were made available to the market through GCC's to feed grain, wheat, cotton and rice program participants bringing the total in GCC's to $2.3 billion. Thus, GCC's have substantially loosened the tight corn free supply. Other factors that have depressed corn prices are weak demand, an extended rotation period for FOR loans, and excellent development of corn and other grain crops this summer.

Weekly Cash Bids at Country Elevators



Actions To Ease Storage Tightness

With the corn supply exceeding 12 billion bushels, the Nation's grain storage capacity (about 22 billion) is expected to be tight in 1986/87. The Government has taken several steps to ease anticipated storage tightness. In March, licensed warehousemen were given the option of storing grain owned by the CCC or under loan in emergency facilities (rail cars, barges, and outside storage). In May, warehousemen were allowed to transfer grain for which receipts had been issued from one approved facility to another (previously prohibited by the Uniform Grain Storage Agreement).

In August, feed grain program participants were enabled to obtain loans on grain stored on the ground. Producers were also given the option of extending 1985-crop 9-month CCC loans for 12 months. This

Feed grains exchanged for generic commodity certificates, accumulated totals

Date	Corn			Sorghum			Barley			Oats		
	CCC	Producer loans	Total	CCC	Producer loans	Total	CCC	Producer loans	Total	CCC	Producer loans	Total
	Million bushels											
June												
18	12.9	34.6	47.5	6.2	1.3	7.5	11.8	3.9	15.7	0.1	0.2	0.3
25	12.9	47.8	60.7	6.2	1.7	7.9	11.8	5.5	17.3	0.1	0.2	0.3
July												
9	16.3	77.7	94.0	12.6	5.2	17.8	13.4	9.1	22.5	0.1	0.3	0.4
16	20.8	89.7	110.5	14.3	5.8	20.1	14.7	11.1	25.8	0.1	0.3	0.4
23	24.0	105.9	129.9	14.5	6.6	21.1	14.8	12.8	27.6	0.2	0.3	0.5
30	28.0	124.5	152.5	14.6	7.4	22.0	14.9	14.2	29.1	0.2	0.3	0.5
August												
6	28.7	145.8	174.5	14.9	8.2	23.1	15.7	15.3	31.0	0.2	0.4	0.6
13	31.2	163.2	194.4	15.6	8.9	24.5	18.6	16.3	34.9	0.3	0.4	0.7

option was designed to keep 1985-crop grain in on-farm facilities longer, by avoiding forfeiture at a time when commercial facilities are expected to be tight.

Producers should be aware that they will miss their window of opportunity to place grain in the FOR if they extend their 9-month loans. Although the FOR is open for 1985-crop grain, extended loans may not enter. Also, the FOR will not likely be open for 1986-crop grains. The Food Security Act of 1985 as amended specified an upper limit on the FOR for feed grains of 15 percent of estimated use. Projected FOR in 1986/87 is now at 20 percent of use. Although the Secretary has the discretion to increase the upper limit by 10 percent if he deems it necessary, the FOR will not likely be open for 1986-crop grain.

SORGHUM

Grain sorghum production is forecast at 860 million bushels, down 23 percent from last year's record 1.1 billion bushels. Yields are down substantially in the Southeast, but are generally quite high otherwise. National average yield is forecast at 63.7 bushels per acre, 3 below last year's record. In early August, crop conditions were mostly good despite some dryness in the Delta. Crop development was ahead of normal everywhere except Texas. In the most important producing States, 62 percent of the crop was headed, compared with 48 percent last year and 45 percent on average.

Stocks of grain sorghum on June 1 were substantially below expectations at 611.8 million bushels. Thus, projected feed use was raised to 650 million bushels, a 10-year high although not an alltime record. Another cause of the low stocks was heavier FSI disappearance, as alcohol producers found sorghum a suitable and inexpensive feed stock. Thus, FSI disappearance is projected to finish 1985/86 at 30 million bushels, 67 percent above a year earlier.

As with corn, sorghum exports have been lagging behind recent years. Through June, sorghum exports were 151 million bushels, compared with 262 million a year earlier.

Sorghum 1985/86 carryout is projected to climb to a record 558 million bushels. As with corn, the farm price of sorghum generally has been 10 to 20 percent below year-earlier levels, or roughly 90 percent of corn price. The 1985/86 season average is estimated at $2.15 per bushel.

With a large carryin but smaller crop, the 1986/87 supply is projected at 1,418 million bushels, up slightly from 1985/86. Although exports are expected to increase by more than a third, domestic disappearance is expected to slow to a more normal pace. Carryout is thus expected to increase, but by only 15 million bushels to 573 million. Although production and use will roughly offset each other, prices will likely continue to decline. The same factors that are depressing corn prices also affect sorghum, and because corn is a nearly perfect substitute, sorghum prices tend to be determined by the corn market. The 1986/87 season average sorghum price is expected to be $1.55 to $1.80 per bushel.

BARLEY

The 1986 barley crop is forecast at a record 650 million bushels from a combined increase in area harvested and yield. Expected production in Montana is up 62 million bushels from last year, with yield expected to double and harvested area to increase by 53 percent. North Dakota's crop may exceed 200 million bushels. Although the harvest in the Northern Plains States was just getting under way in early August, it was progressing well in other parts of the West and Midwest. This will be the third consecutive year of excellent barley crops--1984 was the previous record, with 1985 close behind. Thus, barley prices have been under as much or more pressure than corn and sorghum.

The 1985/86 marketing year ended in June with a strong domestic disappearance of 499 million bushels, but a dismal export performance of 22 million bushels--less than 30 percent of a year earlier. Total disappearance was 521 million bushels, down 30 million from 1984/85, and carryout climbed to 325 million bushels, 65 percent of annual use.

The projected supply for 1986/87 is 980 million bushels, up 15 percent from 1985/86.

Domestic use may decline as feed use drops to 300 million bushels, about the same as in 1984/85.

However, exports are expected to recover substantially for several reasons. Australian exports are projected to decline by half of last year's level as exportable supply is cut by a smaller crop and minimal carryover. Also, the quality of EC barley has been damaged by hot, dry weather. Thus, the demand for high quality malting barley is expected to improve. This demand may partly be met by increased Canadian exports, but the U.S. should get an improved share of world trade. Several EEP initiatives have been offered and Saudi Arabia has brought heavily. At 55 million bushels, projected 1986/87 exports are 250 percent of last year's level.

Large supplies and weak demand have pressured barley prices lower. The farm price has been 20 to 30 percent below a year earlier since May. The season average price is expected to be $1.40 to $1.65 in 1986/87, compared with $2.00 in 1985/86.

GCC's have played an important role in the barley market this summer. By mid-June, 11 million bushels of barley had been acquired from CCC inventories with GCC's, at an average value of $1.29 per bushel. Much of the acquired barley was reportedly malting quality, but was priced by ASCS at its feed value. Merchandisers thus received a higher value product for their certificates. This type of arbitrage is one reason why GCC's have been trading for 10 to 20 percent premiums over face value.

OATS

The August crop report estimated sharply reduced oats production of 443 million bushels, a 14.6-percent drop from the 1985/86 crop year. The large reduction was due to a rather substantial drop in harvested acreage. Much of the planted acreage was not harvested, but was used as a cover crop for diverted acres.

Import levels are projected to remain high at 30 million bushels. Imports will exceed exports for the fourth straight year. However, imports represent a small portion of the supply, less than 10 percent of the total. Lower oat prices for the upcoming crop year and the reduced value of the U.S. dollar will probably mean reduced imports by the end of this crop year.

Feed use of oats has been reduced for 1986/87 to 400 million bushels, down from 458 million in 1985/86. A reduced number of dairy animals as a result of the DTP have contributed to the reduction. Even with lower oat prices, many livestock producers may find that oats are relatively expensive compared with other feed grains.

Domestic oat use is projected to fall 10 percent from last crop year, but the 70-million-bushel reduction in supply will more than offset the loss in demand. Ending stocks are projected to be 169 million bushels, down 8 percent from the previous year. However, abundant supplies of feed grains along with lower loan rates will mean lower average oat prices. The average on-farm price for 1985/86 is estimated at $1.25 per bushel, but the 1986/87 price is expected to range from $1.00 to $1.25.

HAY

Production of all hay is forecast at a record 153 million short tons, 3 percent above 1985. Yield is forecast at a record 2.52 tons per acre. Regional conditions for hay and pasture have reversed since last year. Drought has struck the Southeast, but conditions are greatly improved in the Dakotas, Montana, and Wyoming where roughage supplies were critically short last year. The 1986 hay crop in Alabama, Georgia, and South Carolina is forecast at only 30 to 40 percent of last year's crop, while the Dakotas and Montana may have a crop 1.5 times last year's crop.

Roughage consuming animal units (RCAU's) have declined since 1981/82, when there were 91.8 million units. For 1985/86, RCAU's were estimated at 83.4 million, and are expected to decline to 80.6 million in 1986/87 as the DTP and liquidation in the beef and sheep herds continue. The supply of hay per RCAU in 1985/86 was 2.1 tons, and is expected to climb in 1986/87 to 2.2 tons.

Disappearance in 1985/86 about equaled production to leave May 1 carryin at a comfortable 26.8 million tons. With projected

Hay (all); acreage, supply, and disappearance, 1981/82-1986/87

Item	Unit	1981/82	1982/83	1983/84	1984/85	1985/86	1986/87 1/
Acreage harvested	Mil. acres	59.6	59.8	59.7	61.4	60.6	60.9
Yield per acre	Tons	2.39	2.50	2.36	2.45	2.46	2.52
Carryover (May 1)	Mil. short tons	25.4	25.0	28.1	20.1	26.9	26.8
Production	"	142.5	149.2	140.8	150.6	149.0	153.4
Supply	"	167.9	174.2	168.9	170.7	175.9	180.2
Disappearance	"	142.9	146.1	148.8	143.8	149.1	
Roughage-consuming animal units (RCAU)	Mil. units	91.8	90.2	89.3	85.9	83.4	80.6
Supply per RCAU	Tons	1.83	1.93	1.89	1.99	2.11	2.24
Disappearance per RCAU	"	1.56	1.62	1.67	1.67	1.79	

1/ Forecast.

hay production at 153.4 million tons, the total supply will increase 4.3 million tons to 180.2 million. Disappearance in 1986/87 will likely decline in line with RCAU's but even if it increases to 150 million tons, carryout will increase to 30 million.

In response to larger supplies in 1985/86, hay prices fell roughly $4 per ton to $68.50, and disappearance increased. In 1986/87, fewer animal units and an even greater supply in most of the country have led to further price declines. The national all hay price in July was $58.70 per ton, 14 percent below a year earlier, and the lowest July price since 1979. For the season, hay prices may average $5 to $10 per ton below 1985/86.

FEED DEMAND

Feed disappearance for the four feed grains is an estimated 135.8 million metric tons for the 1985/86 marketing year, up 4.7 million from a year earlier. Wheat feeding was estimated to contribute another 8 million tons. Projections for 1986/87 indicate about a 1-million-ton decline in feed use. Projected large grain supplies and lower prices for 1986/87 would normally indicate increased feed and residual use. However, the poultry industry is the only sector that currently appears poised to take advantage of the low feed costs by increasing use.

The July 1 inventory of all cattle and calves was estimated at 112 million head, down 4 percent from 1985, and down 8 percent from 1984. This was the lowest July 1 inventory since estimates were begun in 1973. The breeding herd was down 3 percent.

The June 1 inventory of all hogs and pigs was estimated at 48.8 million head, down 7 percent from 1985 and the lowest June 1 inventory since 1975. The breeding herd was 9 percent below 1985, and the lowest since estimates were begun in 1964. Farrowing intentions are down 8 to 10 percent for the coming year.

The extremely low livestock inventories and producer intentions for further declines leave the feed demand picture bleak in these sectors. After a 1-percent increase in 1985/86, beef production is projected to decline more than 6 percent in 1986/87. Pork production is declining more than 3 percent in 1986/87, about the same as in 1985/86.

After 2 years of strong increases, milk production is expected to decline about 3 percent in 1986/87, due largely to the effects of the DTP. However, poultry production is expected to increase almost 8 percent. This is no surprise, as poultry output continues its strong, steady increase of several years.

Thus, virtually all animal production other than poultry is on the decline. The extremely low feed prices could spark an increase in hog feeding before the finish of 1986/87, and although beef production will decline, fed cattle marketings are expected to keep pace with 1985/86. But on balance, feed demand will likely stagnate despite low feed costs.

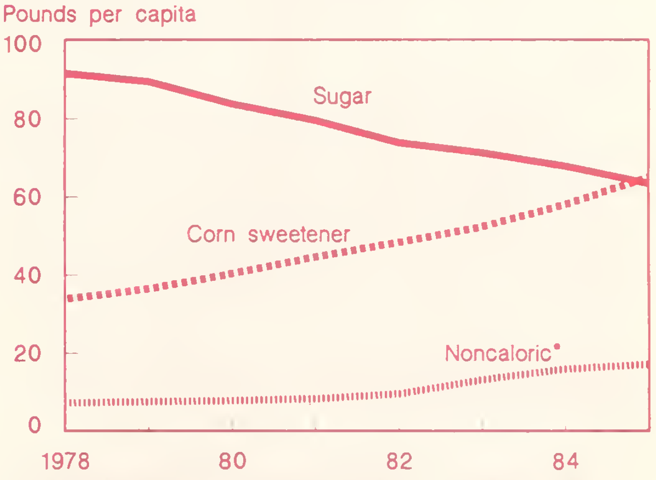
FOOD, SEED AND INDUSTRIAL USE OF CORN

FSI use of corn is projected to continue the upward trend established in the past 10 years. However, evidence is mounting that future increases will not be nearly as large as in the past. In the early 1980's, FSI use increased an average of more than 10 percent a year, but for the 1986/87 crop year, only a 2-percent rise is projected.

Corn sweeteners have played a major role in recent years in the upward trend of FSI use. HFCS production remains the major market force, accounting for 63 percent of all corn sweeteners, up from less than 50 percent 5 years ago. For the first time ever, per capita use of corn sweeteners surpassed sugar in 1985, reaching 64 pounds. Per capita use of sugar has slipped from 91 pounds in 1978 to 63 pounds in 1985.

Demand for HFCS remained strong late this spring with fairly heavy bookings. The extreme tightness that was anticipated in the HFCS market had not developed through the first half of this summer. The threat of some soft drink manufacturers to return to sugar for their sweetening needs has also helped hold the line on price increases of HFCS this summer.

U.S. Sweetener Consumption



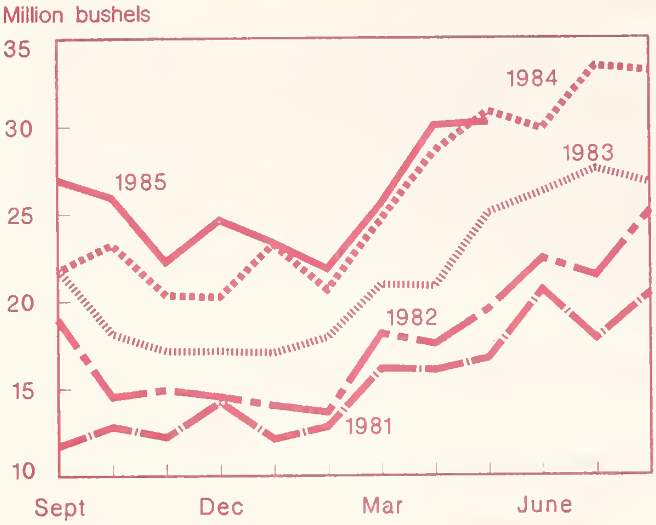
* Sugar sweetness equivalent. Assumes saccharin is 300 times as sweet as sugar and aspartame is 200 times as sweet.

Corn: Food, seed, and industrial use 1/

Year beginning September 1	Wet-milled products				Dry-milled alcohol	Dry-milled and alkaline cooked products	Seed	Total
	HFCS	Glucose and dextrose	Starch	Alcohol				
	Million bushels							
1975	45	162	115	5	20	154	20	521
1976	62	164	116	10	15	155	20	542
1977	80	170	124	10	20	158	20	581
1978	105	170	124	15	20	155	20	608
1979	127	170	120	25	20	158	20	640
1980	165	183	120	35	35	160	20	718
1981	185	183	130	83	35	162	19	797
1982	215	188	127	130	50	170	15	895
1983	256	191	145	150	50	164	19	975
1984	309	188	142	150	86	160	19	1,055
1985	330	190	150	170	110	161	19	1,130
1986 2/	335	195	150	175	115	161	19	1,150

1/ Data in this table are estimates based on production and sales figures obtained from various Government and private industry publications as well as on unpublished information provided by numerous industry sources. 2/ Projected.

Corn Use in HFCS Production



Soft drinks continue to play a strong role in HFCS demand, accounting for approximately 70 percent of all use of HFCS. According to industry sources, HFCS accounted for over 95 percent of the sweeteners used in soft drink beverages in 1985. HFCS can be used for 100 percent of the sweetening requirements of soft drinks, but this is not technically possible in other products that require sweeteners.

Baking and cereal products now use HFCS for 15 percent of their sweetening needs, while dairy products now use nearly 35 percent HFCS. Canning and processing products obtain 60 percent of their sweetener requirements from HFCS. Almost all of the products containing HFCS are approaching their theoretical limits of use. Therefore, increases in HFCS use will come almost entirely from heightened future demand for these end products, population growth, or the development of new uses for HFCS. For the past 10 years, HFCS production has increased an average of more than 20 percent per year, but future growth is likely to be limited to annual increases of 1-2 percent.

Glucose, dextrose, and starch should maintain their growth patterns of the past 10 years. This is due to the fact that these are established markets. Growth should stay in the 1-2 percent area for the near future without the development of new markets.

Plans for the development of a new product in the corn sweetener market were announced this summer: A new line of crystalline fructose sweeteners is intended to compete at least on a partial basis with dry sugar. The product will be used in baked foods, cereal coatings, dry mix desserts, confections, powdered beverage mixes, and processed foods. Crystalline sweeteners are tentatively scheduled to be available in 1987 and are reported to be sweeter than sugar on a per pound basis. If crystalline fructose sweeteners can compete in the marketplace, they would provide an additional outlet for U.S. corn.

Corn use in alcohol production

Marketing year	Wet-milled		Dry-milled		
	Fuel	Beverage 1/	Fuel	Beverage	Total
	Million bushels				
1975	0	5	0	20	25
1976	0	10	0	15	25
1977	0	10	0	20	30
1978	0	15	0	20	35
1979	10	20	0	20	50
1980	20	20	15	20	75
1981	55	30	25	10	120
1982	100	30	40	10	180
1983	120	30	40	10	200
1984	120	30	80	10	240
1985	140	30	100	10	280
1986 2/	145	30	105	10	290

1/ Also includes nonfuel industrial alcohol.
2/ Projected.

The magnitude of corn's role in the U.S. fuel market appears to be less certain than in the past. An estimated 240 million bushels of corn were used during the 1985/86 crop year for ethanol production. With the virtual elimination of lead from gasoline, demand for ethanol as an octane booster was expected to be up 25 percent or more in the coming crop year. Additional demand for ethanol was also expected because Brazilian ethanol is no longer arriving for use in U.S. markets.

However, a number of changes have occurred since those optimistic forecasts were made. First, the sharp decline in crude oil prices has made it more difficult for ethanol to compete with other alternatives to boost octane levels. In particular, the method of simply further refining gasoline to achieve higher octane levels makes ethanol production noncompetitive when crude prices are low.

The U.S. Department of Agriculture introduced a program late this spring designed to assist ethanol producers. The program allows producers to receive GCC's that are good for 1 bushel of corn for each 2.5 bushels they use to produce ethanol from May 10 through September 30. The program was designed to help ethanol producers reduce raw material costs until this fall, when corn prices were expected to be lower because of the anticipated large harvest and lower Government loan rates on corn.

Some fuel companies have stopped using ethanol fuel as an octane booster in certain sections of the country due to perceived quality problems. If the problem or perceived problem can be resolved in the near future, ethanol could resume the large growth rate established in recent years. Of course, higher crude oil prices would help put ethanol on a more competitive basis with other alternatives. This scenario also assumes that State and Federal subsidies remain at or near present levels.

The dry-milled and alkaline-cooked product total remains relatively constant. However, the individual product totals have changed within this category. Corn use for beer production has been declining since the late 1970's, but has been offset by increased use of corn for the manufacture of cereal, corn and tortilla chip products.

WORLD COARSE GRAIN SITUATION

World coarse grain production in 1986/87 is forecast at 821 million tons, down about 23 million from the previous year. Foreign production likely will fall about 3 million tons, with an 8-million-ton drop in the USSR but foreign output still is projected near the 1984/85 record of 571 million.

Production among the major foreign export competitors (Argentina, Australia, Canada, South Africa, and Thailand) in 1986/87 is forecast to fall about 1 million tons to 64 million.

While some Canadian barley area probably shifted to relatively more profitable wheat, expected yield increases will be more than offsetting. A similar shift is taking place in Australia, where the barley area is forecast to fall 500,000 hectares. The absence of price guarantees for barley, while the wheat price remains supported, has been a major factor. However, a return in 1986/87 to more normal corn yields after record crops in 1985/86 in Argentina and Thailand is responsible for lower projected output there.

Hot, dry weather in West Germany and Spain has lowered barley crop prospects, and has hurt the malting quality of barley produced there. Thus, EC demand for imported malting barley will likely increase. Dry weather also affected the French corn crop, likely causing more wheat and barley feeding in the EC.

Aided by improving economic conditions, reduced energy prices, and lower grain prices, global coarse grain trade is forecast to expand to over 90 million tons (excluding intra-EC trade) in 1986/87, up almost 7.5 million from the previous year. The 1986/87 U.S. market share may increase to 52 percent from 43 percent a year earlier.

The 1986/87 coarse grain import forecast for Mexico was lowered 17 percent to 4.8 million tons as a result of reduced demand and limited foreign currency. Evidence of lower demand in 1985/86 has also led to lowered import forecasts for Saudi Arabia and Iraq.

However, an increase of 1 million tons in the forecast of Soviet imports has offset declines in other major importers. Soviet 1986/87 imports are forecast at 17 million tons, up from 1985/86, but well below the 27 million tons imported in 1984/85.

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Adjusting to the New Marketing Year for Corn and Sorghum

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Abstract: Changes in the supply, disappearance and stocks estimates for corn and sorghum have been made this year because of actions by the Congress and the National Agricultural Statistics Service (NASS). The marketing year for corn and sorghum was changed from October 1–September 30 to September 1–August 31, and the frequency of stock reports for sorghum, barley, and oats was reduced. Quarterly supply and demand estimates, and feed year (October–September) estimates have been discontinued for barley and oats. Balance sheets for corn and sorghum supply and use have been adjusted to match the new schedule of stocks surveys. The new corn and sorghum data for marketing years 1975 through present are published in regular supply and disappearance tables in this issue of the Feed Situation and Outlook.

Keywords: Grain stocks, corn, sorghum, supply, disappearance.

The feed grain data base has undergone several changes this year because of actions by the Congress and the National Agricultural Statistics Service (NASS). The Food Security Act of 1985 as amended mandated a change in the marketing year for corn from October 1–September 30 to September 1–August 31. This change has led to changes in the supply, disappearance and stocks estimates for corn and sorghum. To accommodate the new marketing year, NASS moved the fall grain stocks survey from October 1 to September 1. Further program adjustments were made by NASS because of reduced funding in fiscal 1986. Stocks estimates for barley and oats will only be made once a year on June 1. Sorghum stocks will be surveyed on June 1 and September 1. Stocks of corn, wheat, and soybeans will be surveyed on September 1, December 1, March 1, and June 1.

The changes in the grain stocks estimates schedules have had sweeping consequences for feed grain data. Quarterly supply and demand estimates, and feed year (October–September) estimates have been discontinued for barley and oats. Balance sheets for corn and sorghum supply and use have been adjusted to match the new schedule of stocks surveys.

The challenge involved in adjusting to the new survey schedule lay in estimating past years' supply and disappearance balances for the newly defined periods so that a consistent historical data base could be developed. Disappearance for an interval is normally derived as total supply (carryin stocks plus imports and production, if any) less carryout stocks. However, since no stocks estimates exist for September 1, December 1, or March 1, estimated stocks must be derived from disappearance estimates. Retaining June 1 as a survey date was helpful in anchoring the estimates for the rest of the marketing year.

Total disappearance is also defined as the sum of exports, FSI, and feed and residual disappearance. Import and export data are reported monthly, making quarterly estimates for any set of months quite simple. Also, some FSI disappearance may be estimated monthly using reports of HFCS, ethanol, and other product shipments. Other portions of FSI disappearance were interpolated. However, simple interpolation for corn feed and residual disappearance was not deemed the best procedure, because of the effect of early harvest on the original disappearance estimates.

Because, until 1986/87, the marketing year began on October 1, inventories of old-crop grain were surveyed as of that date. All production of new-crop corn was treated on the balance sheet as if it were unavailable before October 1. To the extent that new-crop corn was harvested and used before the official start of the marketing year, summer supplies and disappearance were understated, while fall supplies and disappearance were overstated. This explains why the marketing year was moved back to September 1 in the first place. However, simple interpolation of feed and residual disappearance would exacerbate this problem by shifting a month's worth (roughly one fourth of the total) of understated summer disappearance forward into the overstated fall disappearance.

A better procedure, and the one adopted for historical data adjustments, is to first correct for the downward bias in June-September feed and residual (or the upward bias in October-December) disappearance, then interpolate to derive a June-August disappearance. The correction in June-September disappearance was accomplished by running a least squares regression on feed and residual disappearance (million bushels) for June-September to determine the effect of early harvest grain on the summer estimate, using data from 1973 through 1985.

To arrive at the best estimate, two other variables that affect feed use were also included in the regression: an estimate of summer wheat feeding (million bushels) and grain consuming animal units (GCAU's--million units). The regression results are presented in table 1.

The R^2 indicates that 89 percent of the variation in June-September feed and residual disappearance is explained by the equation. The F-test for the equation indicates the equation is significant at the 99 percent level of confidence. The coefficients all have expected signs, and all are significant at the 95 percent level of confidence.

The interpretation of the regression coefficients is straightforward, and important for the adjustment in feed and residual disappearance. For every unit increase in GCAU's, summer feed use increases 25.6 bushels. For every bushel of wheat fed, corn feeding declines by almost one bushel. Finally, for every bushel of corn harvested before October 1, June-September feed and residual disappearance declines by .12544 bushels.

Table 1.--Least squares regression on June-September corn feed and residual disappearance

Independent variable	Units	Coefficient	t-statistic
Intercept	---	-907.4889	-2.37
Grain consuming animal units	Mil.	25.6382	5.33
Wheat feed use	Mil. bu.	-0.9767	-5.13
Early harvest	"	-0.12544	-2.36

F-statistic = 24.2
R^2 = .89

The coefficient for early harvest is used in correcting for the bias in the data. The product of the regression coefficient (.12544) times the millions of bushels of early harvest gives the correction applied to June-September feed and residual. In some years this correction is extremely important to the disappearance estimate. Then, the disappearance is reduced by the number of days lost when September is shifted forward.

For example, in 1985, the early harvest was estimated to be 1,239.7 million bushels. This quantity multiplied by .12544 gives a correction or downward bias of 155.5 million bushels. This bias, added to the June-September feed and residual gives a corrected disappearance of 811.5 million bushels. The corrected June-September disappearance times .7541 (the ratio of days in June-August to days in June-September) gives the estimate of June-August feed and residual disappearance.

With June 1 stocks already available, and other supply and use categories estimated, September 1 stocks are estimated by June 1 stocks plus June-August imports, less June-August disappearance (the previously described feed and residual, FSI, plus exports). Adjustments to stocks, supply, and use in successive quarters were carried forward in a manner consistent with the

Table 2.--Summer quarter feed and residual disappearance of corn

Year	June-September feed and residual	Early harvest	Correction	June-August feed and residual
	Million bushels			
1975	649	764	95.9	561.7
1976	766	1,059	132.9	677.8
1977	792	1,331	166.9	723.1
1978	797	1,065	133.6	701.7
1979	900	708	88.8	745.7
1980	953	1,277	160.2	839.5
1981	830	1,211	151.9	740.5
1982	841	891	111.9	718.6
1983	891	1,004	125.9	766.8
1984	553	994	124.8	511.1
1985	656	1,240	155.5	612.0

September 1 adjustments. The amount by which summer quarter use was changed represents estimated use for September. This quantity was shifted from June-September to September-November disappearance, while estimated December use was shifted from October-December to December-February disappearance.

September 1 stocks plus production plus September-November imports, less September-November disappearance define estimated December 1 stocks. Finally, December 1 stocks, plus December-February imports, less December-February disappearance define estimated March 1 stocks.

Since the June 1 stock date will not change, those data remain the same, as previously reported. However, supply and disappearance data will differ for all quarters since all periods now include different months.

Summer feed use for sorghum was determined by straight interpolation based on the loss in days when shifting September to the fall quarter. Although a strong argument could be made in favor of adjusting for the early harvest bias in sorghum (similar to the procedure for corn), this procedure was not followed. Regression estimates of the effect of early harvest on summer sorghum feed and residual disappearance were so large that June-August feed use estimates appeared excessive; September 1 stocks estimates based on this procedure were universally lower than the October 1 estimate, and implied free stocks were frequently negative. Thus, the procedure was abandoned.

The rest of the procedure for adjusting the sorghum supply and demand balance sheet was similar to that for corn, except that the new sorghum balance sheet has only two periods per year (September-May and June-August) to match the June 1 and September 1 stocks estimates (all others discontinued by NASS).

The new corn and sorghum data for marketing years 1975 through present are published in regular supply and disappearance tables in this issue of the Feed Situation. The size of the adjustments made may be determined by comparing current estimates for the September-August year with estimates published in the December 1985 Feed Situation Yearbook, based on the October-September marketing year.

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How Marketing Loans Would Determine Price Floors for Wheat and Feed Grains //

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Abstract: Under the Food Security Act of 1985, the Secretary of Agriculture has discretionary power to implement a marketing loan program for wheat and the feed grains. This program would allow farmers to repay their price support loans at a price less than the loan rate. The loan rate would no longer act as a floor to market prices. The analysis shows that the effective price floor for wheat could be 30 cents lower than under the current program, while the price floor to corn could fall as much as 24 cents.

Keywords: Marketing loan, effective loan rate, price floor.

Under provisions of the Food Security Act of 1985, the Secretary of Agriculture has the option to offer wheat and feed grain producers a marketing loan. If implemented, the marketing loan program would allow farmers to repay their price support loans at the higher of the world price or 70 percent of the basic loan rate. A similar marketing loan program was in place for the 1985/86 rice crop, and for the 1986/87 crop years the program was extended to include rice and cotton. While the Department does not plan to implement a marketing loan for wheat and feed grains in 1986/87, the Secretary has discretionary power to implement such a program should the need arise to make these grains more competitive in world markets.

Of particular interest to producers is how such a program would influence market prices. The current price support program, operating through 9 month nonrecourse CCC loans, usually sets an effective floor on market prices. If the price falls below this floor, producers who are program participants will place their grain under loan, causing the price to rise to the loan rate. Under the marketing loan, producers can repay their loans at a lower rate and sell their grain on the market. The loan rate is no longer the effective floor.

This paper examines how a marketing loan program could work and how it would affect the marketing decisions of producers. The program is compared with the current price support program to show how it may affect market prices. The analysis shows that the marketing loan provides a floor to the market price, but that the new floor is substantially lower than current loan rate levels.

How the Current Price Support Program Affects Market Prices

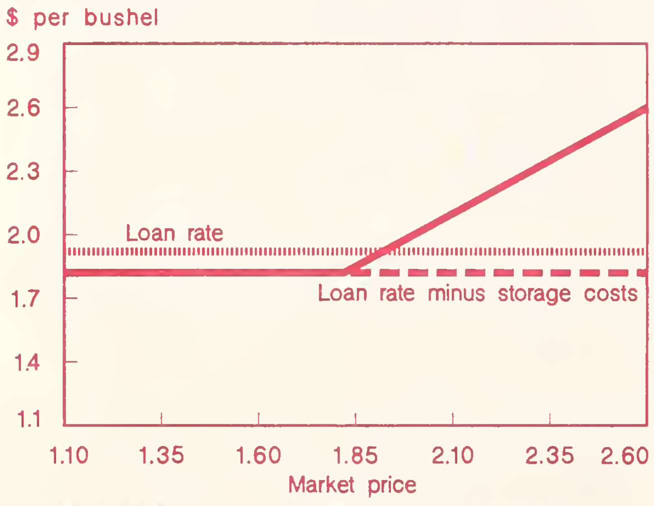
Under the current commodity loan program for wheat and feed grains program participants can choose to sell their crop on the cash market at harvest, place their crop in storage in anticipation of selling the crop later in the marketing year, or place the crop under loan with the Government. While many producers use the commodity loan program as a marketing strategy, and some farmers actually repay their loans even when the market price is below the loan rate, in this analysis it is assumed that producers place their crop under loan with the intention of forfeiting their crop unless the price rises sufficiently to repay the loan plus interest.

If a farmer chooses to take a nonrecourse loan from the CCC he will receive the county level loan rate adjusted for any quality and grade differences. Most of the current commodity loans are for 9 months. The producer is responsible for storage costs incurred on the grain, while under loan. If the producer chooses to sell the crop before the loan matures, he must repay the loan plus any interest that has accrued. If the farmer chooses not to repay the loan at maturity, he can forfeit the loan collateral (the commodity) to the Government as settlement (1).

If the market price at harvest falls below what a producer can earn by placing the crop under loan, he will have a strong incentive to place the crop under loan. As more grain is placed under loan, the market price will rise, in turn, to the effective support rate. However, the availability of generic commodity certificates will mitigate the effectiveness of the loan program to support prices. Yet while the loan program provides an effective floor to market prices, the floor itself is somewhat below the loan rate because producers must pay storage fees while the grain is under loan. The net loan rate faced by the producer at harvest is the loan rate minus the costs of storing the grain for the 9 months. Storage costs incurred would be much greater for commercial facilities than for on-farm storage.

Figure 1 demonstrates how the loan rate provides an effective floor for market prices. The vertical axis represents the market price faced by the producer at harvest, while the horizontal axis shows his corresponding return. In this example, it is assumed that the loan rate for corn is $1.92 per bushel and the out-of-pocket cost of storing corn for 9 months is 10 cents. The effective price floor faced by farmers at harvest is thus $1.82 per bushel. If prices exceed $1.82, producers will sell their grain on the cash market. If the market price is less than this figure, they will take a loan with the intention of forfeiting the grain to the CCC. As more grain is placed under loan, the free supply is restricted and the market price will rise to $1.82. Thus, the loan program usually provides an effective floor below which prices will not fall.

Figure 1
Prices Received by Corn Producers*



* For various market prices under the current commodity loan program.

The Marketing Loan Program

Under a marketing loan program, if the world price is below the loan rate producers may repay their loans at the world price, as determined by the Secretary, or 70 percent of the basic loan rate, whichever is higher. Farmers would not be required to repay loans at a level higher than the announced loan rate. For the 1986–90 crops, the Secretary may make payments to producers who elect to forego obtaining a loan in return for the payment. The loan payment is the difference between the loan rate determined for the crop and the loan repayment level multiplied by the quantity of the crop eligible for the loan. The amount of the commodity eligible for this payment would be determined by multiplying the individual farm program acreage for the crop by the farm program payment yield (1, 2).

If the marketing loan program is used, the Secretary must issue a formula defining the world market price and develop a mechanism for the periodic announcement of such price. There is no currently available, recognizable index or formula used by the United States or other wheat or feed grain exporting countries for determining the prevailing world market price for these commodities. For the rice marketing loan program, the world price is determined by reviewing prices at which rice is being traded in the world market and weighting these prices based on information such as supply and demand changes, tender results, and other relevant price indicators. This weighted average price is then adjusted to reflect U.S. equivalent values for rice at free-on-board (F.O.B.) vessel positions at U.S. ports. Presumably, world prices for wheat and the feed grains would be determined in comparable fashion.

How would the marketing loan affect producers' marketing decisions? For corn, the basic initial loan rate for the 1986/87 crop year is $2.40 per bushel. The loan rate for corn, as announced by the Secretary, is 80 percent of the basic loan rate, or $1.92 per bushel. (In this analysis we ignore the 4.3-percent reduction under the Gramm-Rudman-Hollings Deficit Reduction Act but this also lowers the effective price support floor.) If it is assumed that the world price for corn is less than 70 percent of the basic loan rate, or $1.68 per bushel, a producer who repays his loan will receive 24 cents a bushel in addition to the price he receives on the market. What would the producer choose if the market price at harvest were $1.82 per bushel? As we saw previously, under the current program a producer would be indifferent to selling the crop on the open market or placing the crop under loan. However, under a marketing loan he could take a loan at $1.92, repay it at $1.68 and sell his crop at $1.82, thus netting $2.06 per bushel for his corn. While it is unlikely that the world price would differ so sharply from U.S. price, for the purposes of this analysis, such a scenario is not ruled out until more is known about how the world price is determined.

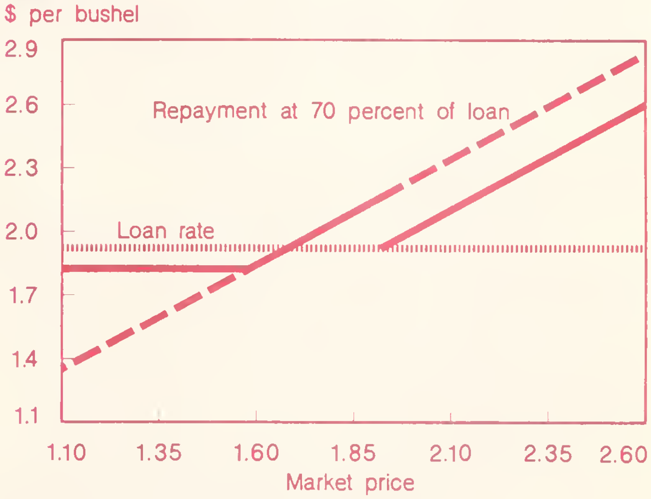
How low would the market price have to fall before producers would forfeit the grain to the Government rather than repay the loan? If the market price were $1.58 per bushel, a producer would receive 24 cents for the marketing loan, netting a return of $1.82 per bushel. This is the same return faced by a producer who takes a nonrecourse Government loan at $1.92 and stores the grain for 9 months (at a cost of 10 cents per bushel). If market price falls below $1.58, producers would choose to forfeit the grain to the CCC. In this example, the marketing loan effectively puts a floor on corn prices at $1.58 per bushel, that is, the loan repayment rate minus 9 months' storage costs.

Figure 2 shows the net return to producers for various market prices. At prices above $1.58 per bushel, it is in producers' best interests to take and repay the loan and sell their crop on the cash market. Producers can place their crops under loan if the market price is less than the loan rate. At this price ($1.92 per bushel) the net return to the producer is $2.16 per bushel. Paradoxically, if the market price exceeded the loan rate, the marketing program would no longer be in effect and the return to farmers would be less than the return if the market price were between $1.68 and $1.92.

The world price determines the effective loan rate when it exceeds the 70 percent loan repayment rate. Participating producers who take loans and repay at the world price would receive the difference between the loan rate and the world price. For example, if the world price for corn were $1.70, the producer would receive 22 cents in addition to the cash market price. The relationship of the net farm return to the market price is essentially the same as before except that the price floor is shifted upward to the world price minus the costs of storage (See figure 3). At a world price of $1.70, net returns to the producer would be the same under a marketing loan as for a nonrecourse loan at a market price of

Figure 2

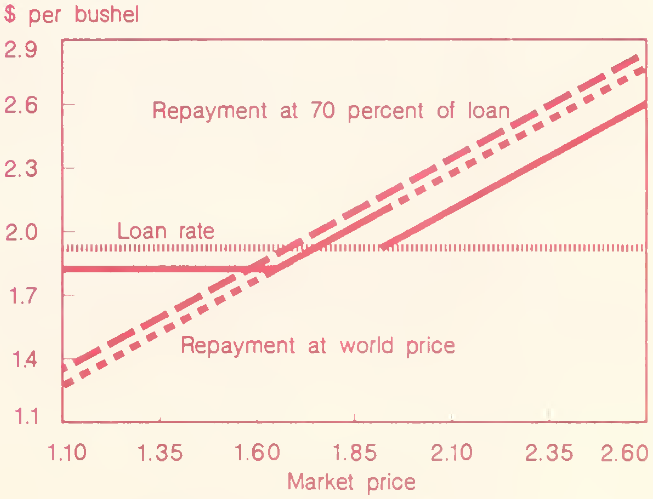
Effect of Marketing Loan on Producer Returns*



* Where repayment rate is 70 percent of basic loan rate.

Figure 3

Effect of Marketing Loan on Producer Returns*



* Where repayment rate is world price of $1.75 a bushel.

Table I.--The effect of a marketing loan on the effective price floor for wheat and feed grains

Loan rate	Commodity				
	Corn	Wheat	Sorghum	Barley	Oats
			Dollars per bushel		
Basic initial loan rate 1/	2.40	3.00	2.28	1.95	1.24
1986 loan rate announced by the Secretary	1.92	2.40	1.82	1.56	.99
Seventy percent repayment rate 2/	1.68	2.10	1.59	1.37	.87
Storage cost for nine months	.10	.10	.10	.10	.10
Effective price floor	1.58	2.00	1.49	1.27	.77

1/ Basic initial loan rates for sorghum, barley and oats are not specified in the 1985 Food Security Act, but are set in accordance with historical cash relationship to corn. 2/ It is assumed that the world price is less than seventy percent of the basic initial loan rate.

$1.60. Below this price the producer would be better off forfeiting the grain.

How low could prices for wheat and feed grains fall under a marketing loan? Table I presents the minimum effective price floors for corn, wheat, sorghum, barley, and oats if a marketing loan were put in place at current 1986/87 loan rate levels. It is assumed that the world price is below 70 percent of the basic initial loan rate and that the cost of storage is 10 cents per bushel per 9 months. If the world price is above the 70-percent repayment rate or if storage costs are less than 10 cents, the actual market price needed to induce farmers to repay their loans would be somewhat higher. The figures here represent the minimum levels to which market prices could fall under a marketing loan. The differences between the price floors provided by the current loan program and those for a marketing loan range from 12 cents for oats to 30 cents for wheat.

The marketing loan program would thus lower the price floor for these commodities. Under a range of market prices, producers would benefit from such a program and elect to market their grain on the cash market rather than forfeiting it to the CCC. As more grain enters the marketplace rather than the loan program, prices would fall and grains would become more competitive on world markets. While an estimate of the costs of such a program is beyond the scope of this paper it should be noted that the costs would increase, particularly since individuals would not be bound by the $50,000 payment limitation. Future analysis should provide more accurate estimates on the costs and benefits of such a program.

References

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Table 1.—Feed grains: Marketing year supply, disappearance, area, and prices, 1981/82-1986/87 1/

Year 2/	Supply				Disappearance						Ending stocks		
					Domestic use								
	Beginning stocks	Production	Imports	Total	Food, alcohol, and industrial	Seed	Feed and residual	Total	Exports	Total disappearance	Govt. owned	Privately owned 3/	Total
	Million metric tons												
1981/82	44.2	246.2	0.3	290.7	24.4	1.4	127.4	152.8	59.9	212.7	8.3	69.7	78.0
1982/83	78.0	250.2	0.3	328.5	26.5	1.4	139.0	166.9	53.0	219.9	33.5	75.1	108.6
1983/84	108.6	136.4	0.7	245.7	28.3	1.5	119.7	149.5	56.6	206.1	8.0	31.6	39.6
1984/85	39.6	236.9	0.8	277.3	30.6	1.5	131.1	163.2	56.6	219.8	8.9	48.6	57.5
1985/86	57.5	273.8	0.7	332.0	32.8	1.5	135.8	170.1	36.1	206.2	22.2	103.6	125.8
1986/87 4/	125.8	253.7	0.6	380.1	- - 35.0 - -		134.9	169.9	46.7	216.6	43.9	119.6	163.5

Year 2/	Area				Yield per harvested hectare	Index	Government-support program
	National program	Set-aside and diverted	Planted	Harvested for grain		Average price received by farmers 5/	Total payments to participants
	- - - - - - - - - - - - - - Million hectares - - - - - - - - - - - - - -				Metric tons	1977=100	Million dollars
1981/82	42.5	---	49.9	43.1	5.71	124	6/ 423
1982/83	---	1.3	49.1	42.9	5.83	130	6/ 419
1983/84	---	15.9	41.6	32.5	4.20	156	7/ 1,103
1984/85	---	2.1	49.5	43.2	5.48	130	8/ 1,860
1985/86	---	2.9	51.8	45.1	6.07		8/ 2,785
1986/87	---	7.1	48.5	41.6	6.10		7/ 6,455

1/ Aggregated data on corn, sorghum, barley, and oats. 2/ Marketing year beginning September 1 for corn and sorghum; June 1 for oats and barley. 3/ Includes total Government loans (original and reseal). 4/ Projected. 5/ Excludes support payments. 6/ Deficiency and disaster payments. 7/ Deficiency and diversion payments. 8/ Deficiency payments.

Table 2.—Corn: Marketing year supply and disappearance, area, and prices, 1981/82-1986/87

Year beginning September 1	Supply				Disappearance						Ending stocks Aug. 30		
					Domestic use								
	Beginning stocks	Production	Imports	Total	Food, alcohol, and industrial	Seed	Feed and residual	Total	Exports	Total disappearance	Govt. owned	Privately owned 1/	Total
	Million bushels												
1981/82	1,392.1	8,118.7	1.1	9,511.9	777.8	19.4	4,168.6	4,965.8	2,009.5	6,975.3	280.1	2,256.5	2,536.6
1982/83	2,536.6	8,235.1	0.7	10,772.4	880.3	14.5	4,520.7	5,415.5	1,833.8	7,249.3	1,142.7	2,380.4	3,523.1
1983/84	3,523.1	4,174.7	2.7	7,700.5	956.0	18.9	3,817.8	4,792.7	1,901.5	6,694.2	201.5	804.8	1,006.3
1984/85	1,006.3	7,674.0	3.5	8,683.8	1,035.2	19.4	4,115.6	5,170.2	1,865.4	7,035.6	224.9	1,423.3	1,648.2
1985/86	1,648.2	8,865.0	5.2	10,518.4	1,110.0	18.6	4,151.8	5,280.4	1,225.0	6,505.4	600.0	3,413.0	4,013.0
1986/87 2/	4,013.0	8,316.2	1.0	12,330.2	- 1,150.0 -		4,250.2	5,400.2	1,550.0	6,950.2	1,375.0	4,005.0	5,380.0

Year beginning September 1	Area				Yield per harvested acre	Average prices				Government-support program		
	National program	Set-aside and diverted	Planted	Harvested for grain		Received by farmers 3/	St. Louis No. 2 Yellow	Omaha No. 2 Yellow	Gulf Ports No. 2 Yellow	National average loan rate	Target price	Total payments to participants
	Million acres				Bushels	Dollars per bushel						Mil. dol.
1981/82	80.5	—	84.1	74.5	108.9	2.50	2.63	2.48	2.87	2.40	2.40	5/ 92
1982/83	—	2.1	81.9	72.7	113.2	2.68	2.87	2.73	3.06	2.55	2.70	6/ 292
1983/84	—	32.2	60.2	51.5	81.1	3.25	3.49	3.23	3.67	2.65	2.86	7/ 904
1984/85	—	4.0	80.5	71.9	106.7	2.62	2.81	2.65	3.00	2.55	3.03	8/ 1,652
1985/86	—	5.4	83.3	75.1	118.0	2.35	4/ 2.43	4/ 2.31	4/ 2.37	2.55	3.03	8/ 2,400
1986/87	—	13.0	76.6	69.1	120.4	1.65-1.90				1.92	3.03	9/ 5,520

1/ Includes quantity under loan and farmer-owned reserve. 2/ Projected. 3/ Excludes support payments. 4/ September 1985-July 1986 average. 5/ Disaster payments. 6/ Deficiency and disaster payments. 7/ Diversion payments. 8/ Deficiency payments. 9/ Deficiency and diversion payments.

Table 3.--Sorghum: Marketing year supply and disappearance, area, and prices, 1981/82-1986/87

Year beginning September 1	Supply				Disappearance						Ending stocks Aug. 30		
					Domestic use								
	Beginning stocks	Production	Imports	Total	Food, alcohol, and industrial	Seed	Feed and residual	Total	Exports	Total disappearance	Govt. owned	Privately owned 1/	Total
	Million bushels												
1981/82	130.3	875.8	---	1,006.1	8.8	2.0	417.0	427.8	259.7	687.5	41.8	276.8	318.6
1982/83	318.6	835.1	---	1,153.7	7.9	1.8	494.8	504.5	210.1	714.6	171.5	267.6	439.1
1983/84	439.1	487.5	0.1	926.7	7.7	2.1	384.9	394.7	244.6	639.3	102.8	184.6	287.4
1984/85	287.4	866.2	0.1	1,153.7	15.3	2.5	538.8	556.6	296.9	853.5	112.1	188.1	300.2
1985/86	300.2	1,112.6	---	1,412.8	27.2	2.5	650.0	679.7	175.0	854.7	225.0	333.1	558.1
1986/87 2/	558.1	860.0	---	1,418.1	- 29.9 -		575.0	604.9	240.0	844.9	275.0	298.0	573.0

Year beginning September 1	Area				Yield	Average prices				Government-support program		
	National program	Set-aside and diverted	Planted	Harvested for grain	per harvested acre	Received by farmers 3/	Kansas City No. 2 Yellow	Texas No. 2 Yellow	Gulf ports No. 2 Yellow	National average loan rate	Target price	Total payments to participants
	- - - - - - - Million acres - - - - - - -				Bushels	- - - - - - - - - - - - - Dollars per cwt. - - - - - - - - - - - - -						Mil. dol.
1981/82	14.3	---	15.9	13.7	64.0	4.25	4.29	4.87	5.03	4.07	4.55	6/ 268
1982/83	---	0.7	16.0	14.1	59.1	4.50	4.80	5.19	5.41	4.32	4.64	6/ 67
1983/84	---	5.7	11.9	10.0	48.7	5.07	5.22	5.53	5.77	4.50	4.86	7/ 114
1984/85	---	0.6	17.3	15.4	56.4	4.27	4.46	5.04	4.90	4.32	5.14	8/ 158
1985/86	---	0.9	18.3	16.7	66.7	3.84	4/ 3.81	4/ 4.41	4/ 4.20	4.32	5.14	8/ 225
1986/87	---	2.5	15.0	13.5	63.7	2.77-3.21				3.25	5.14	9/ 577

1/ Includes quantity under loan and farmer-owned reserve. 2/ Projected. 3/ Excludes support payments. 4/ September 1985-July 1986 average. 5/ Disaster payments. 6/ Deficiency and disaster payments. 7/ Diversion payments. 8/ Deficiency payments. 9/ Deficiency and diversion payments.

Table 4.—Barley: Marketing year supply and disappearance, area, and prices, 1981/82-1986/87

Year beginning June 1	Supply				Disappearance						Ending stocks May 31		
	Beginning stocks	Production	Imports	Total	Domestic use: Food, alcohol, and industrial	Domestic use: Seed	Domestic use: Feed and residual	Domestic use: Total	Exports	Total disappearance	Govt. owned	Privately owned 1/	Total
	Million bushels												
1981/82	137.3	473.5	9.6	620.4	158.0	16.3	198.2	372.5	100.1	472.6	3.3	144.5	147.8
1982/83	147.8	515.9	10.7	674.4	152.7	17.4	240.4	410.5	47.2	457.7	6.0	210.7	216.7
1983/84	216.7	508.9	7.1	732.7	149.5	19.9	282.4	451.8	91.5	543.3	11.9	177.5	189.4
1984/85	189.4	599.2	10.1	798.7	149.0	21.2	304.2	474.4	76.9	551.3	14.6	232.8	247.4
1985/86	247.4	589.2	9.0	845.6	147.2	19.6	332.4	499.2	21.8	521.0	57.4	267.2	324.6
1986/87 2/	324.6	650.0	5.0	979.6	- 174.6 -		300.0	474.6	55.0	529.6	90.0	360.0	450.0

Year beginning June 1	Area				Yield per harvested acre	Average prices				Government-support program		
	National program	Set-aside and diverted	Planted	Harvested for grain		Received by farmers 3/	Minneapolis: No. 2 or better feed	Minneapolis: No. 3 or better malting	Portland: No. 2	National average loan rate	Target price	Total payments to participants
	Million acres				Bushels	Dollars per bushel						Mil. dol.
1981/82	10.2	—	9.6	9.0	52.4	2.44	2.21	3.06	2.87	1.95	2.60	5/ 63
1982/83	—	0.4	9.5	9.0	57.2	2.22	1.76	2.53	2.52	2.08	2.60	7/ 60
1983/84	—	1.1	10.4	9.7	52.3	2.50	2.48	2.84	2.91	2.16	2.60	8/ 72
1984/85	—	0.5	12.0	11.2	53.4	2.26	2.09	2.55	2.59	2.08	2.60	7/ 50
1985/86	—	0.7	13.1	11.6	51.0	2.00	1.53	2.24	2.22	2.08	2.60	7/ 150
1986/87	—	1.8	13.2	12.4	52.2	1.40-1.65	4/ 1.20	4/ 1.80	4/ 1.89	1.56	2.60	8/ 304

1/ Includes quantity under loan and farmer-owned reserve. 2/ Projected. 3/ Excludes support payments. 4/ June-July 1986 average. 5/ Deficiency and disaster payments. 6/ Disaster payments. 7/ Deficiency payments. 8/ Deficiency and diversion payments.

Table 5.—Oats: Marketing year supply and disappearance, area, and prices, 1981/82-1986/87

Year beginning June 1	Supply				Disappearance						Ending stocks May 31		
					Domestic use								
	Beginning stocks	Production	Imports	Total	Food and Industrial	Seed	Feed and residual	Total	Exports	Total disappearance	Govt. owned	Privately owned 1/	Total
	Million bushels												
1981/82	177.0	509.5	1.6	688.1	41.2	35.4	453.0	529.6	6.6	536.2	0.7	151.2	151.9
1982/83	151.9	592.6	3.9	748.4	41.7	43.3	440.6	525.6	3.0	528.6	0.7	219.1	219.8
1983/84	219.8	477.0	30.1	726.9	40.9	36.6	466.2	543.7	2.1	545.8	1.5	179.6	181.1
1984/85	181.1	473.7	34.0	688.8	41.0	33.2	433.4	507.6	1.3	508.9	1.6	178.3	179.9
1985/86	179.9	518.6	27.5	726.0	44.0	39.0	457.6	540.6	2.2	542.8	1.9	181.3	183.2
1986/87 2/	183.2	443.2	30.0	656.4	- 85.0 -		400.4	485.4	2.0	487.4	2.0	167.0	169.0

Year beginning June 1	Area				Yield	Average prices				Government-support program		
	National program	Set-aside and diverted 3/	Planted	Harvested for grain	per harvested acre	Received by farmers 4/	Minneapolis No. 2 white, heavy	Portland No. 2 white, heavy	Toledo No. 2	National average loan rate	Target price	Total payments to participants
	Million acres				Bushels	Dollars per bushel						Mil. dol.
1981/82	—	—	13.6	9.4	54.2	1.89	2.14	2.34	2.23	1.24	—	—
1982/83	—	0.1	14.0	10.3	57.8	1.49	1.69	2.18	1.55	1.31	1.50	—
1983/84	—	0.3	20.3	9.1	52.6	1.67	1.87	1.95	2.01	1.36	1.60	6/ 13
1984/85	—	0.1	12.4	8.2	58.0	1.69	1.81	2.12	1.92	1.31	1.60	—
1985/86	—	0.1	13.3	8.1	63.6	1.25	1.31	1.63	1.08	1.31	1.60	7/ 10
1986/87	—	0.7	14.8	7.5	58.8	1.00-1.25	5/ 1.12	5/ 1.26	5/ .82	.99	1.60	6/ 54

1/ Includes quantity under loan and farmer-owned reserve. 2/ Projected. 3/ Not included in the program until 1982. 4/ Excludes support payments. 5/ June-July 1986 average. 6/ Deficiency and diversion payments. 7/ Deficiency payments.

Table 6.—Corn: Marketing year supply and disappearance, specified periods, 1975/76-1985/86

Year and periods beginning September 1	Supply				Disappearance						Ending stocks		
					Domestic use								
	Beginning stocks	Production	Imports	Total	Food, alcohol, and industrial	Seed	Feed and residual	Total	Exports	Total disappearance	Govt. owned	Privately owned 1/	Total
	Million bushels												
1975/76													
Sept.-Nov.	558.0	5,840.8	0.3	6,399.1	123.8	—	923.8	1,047.6	376.9	1,424.5	0.3	4,974.3	4,974.6
Dec.-Feb.	4,974.6	—	0.7	4,975.3	114.4	—	1,057.8	1,172.2	429.5	1,601.7	0.2	3,373.4	3,373.6
Mar.-May	3,373.6	—	0.2	3,373.8	130.0	16.1	909.4	1,055.5	449.5	1,505.0	0.4	1,868.4	1,868.8
June-Aug.	1,868.8	—	0.5	1,869.3	132.5	4.0	677.8	814.3	421.8	1,236.1	0.2	633.0	633.2
Mkt. year	558.0	5,840.8	1.7	6,400.5	500.7	20.1	3,568.8	4,089.6	1,677.7	5,767.3	0.2	633.0	633.2
1976/77													
Sept.-Nov.	633.2	6,289.2	0.5	6,922.9	130.3	—	933.9	1,064.2	471.5	1,535.7	0.2	5,387.0	5,387.2
Dec.-Feb.	5,387.2	—	0.4	5,387.6	117.9	—	1,036.2	1,154.1	385.3	1,539.4	0.1	3,848.1	3,848.2
Mar.-May	3,848.2	—	0.6	3,848.8	131.9	16.1	897.2	1,045.2	433.6	1,478.8	0.3	2,369.7	2,370.0
June-Aug.	2,370.0	—	1.0	2,371.0	142.0	4.0	723.1	869.1	366.3	1,235.4	0.2	1,135.4	1,135.6
Mkt. year	633.2	6,289.2	2.5	6,924.9	522.1	20.1	3,590.4	4,132.6	1,656.7	5,789.3	0.2	1,135.4	1,135.6
1977/78													
Sept.-Nov.	1,135.6	6,505.0	0.7	7,641.3	138.9	—	1,013.5	1,152.4	402.2	1,554.6	0.2	6,086.5	6,086.7
Dec.-Feb.	6,086.7	—	0.7	6,087.4	128.6	—	1,066.4	1,195.0	410.8	1,605.8	0.4	4,481.2	4,481.6
Mar.-May	4,481.6	—	0.6	4,482.2	141.7	15.6	935.6	1,092.9	528.2	1,621.1	0.4	2,860.7	2,861.1
June-Aug.	2,861.1	—	0.6	2,861.7	152.3	3.9	701.7	857.9	567.9	1,425.8	3.5	1,432.4	1,435.9
Mkt. year	1,135.6	6,505.0	2.6	7,643.2	561.5	19.5	3,717.2	4,298.2	1,909.1	6,207.3	3.5	1,432.4	1,435.9
1978/79													
Sept.-Nov.	1,435.9	7,267.9	0.2	8,704.0	146.7	—	1,157.9	1,304.6	471.2	1,775.8	60.3	6,867.9	6,928.2
Dec.-Feb.	6,928.2	—	0.4	6,928.6	135.1	—	1,226.7	1,361.8	415.7	1,777.5	95.2	5,055.9	5,151.1
Mar.-May	5,151.1	—	0.3	5,151.4	157.5	15.6	1,133.6	1,306.7	557.5	1,864.2	100.6	3,186.6	3,287.2
June-Aug.	3,287.2	—	0.4	3,287.6	149.2	3.9	745.7	898.8	679.3	1,578.1	100.5	1,609.0	1,709.5
Mkt. year	1,435.9	7,267.9	1.3	8,705.1	588.5	19.5	4,263.9	4,871.9	2,123.7	6,995.6	100.5	1,609.0	1,709.5
1979/80													
Sept.-Nov.	1,709.5	7,928.1	0.3	9,637.9	151.5	—	1,267.5	1,419.0	624.8	2,043.8	99.6	7,494.5	7,594.1
Dec.-Feb.	7,594.1	—	0.2	7,594.3	140.3	—	1,296.2	1,436.5	600.8	2,037.3	100.1	5,456.9	5,557.0
Mar.-May	5,557.0	—	0.2	5,557.2	159.6	16.0	1,146.1	1,321.7	591.2	1,912.9	213.5	3,430.8	3,644.3
June-Aug.	3,644.3	—	0.2	3,644.5	168.1	4.0	839.5	1,011.6	598.6	1,610.2	260.1	1,774.2	2,034.3
Mkt. year	1,709.5	7,928.1	0.9	9,638.5	619.5	20.0	4,549.3	5,188.8	2,415.4	7,604.2	260.1	1,774.2	2,034.3

Continued—

Table 6.—Corn: Marketing year supply and disappearance, specified periods, 1975/76-1985/86—continued

Year and periods beginning September 1	Supply				Disappearance						Ending stocks		
	Beginning stocks	Production	Imports	Total	Domestic use: Food, alcohol, and industrial	Domestic use: Seed	Domestic use: Feed and residual	Domestic use: Total	Exports	Total disappearance	Govt. owned	Privately owned 1/	Total
	Million bushels												
1980/81													
Sept.-Nov.	2,034.3	6,639.4	0.5	8,674.2	168.7	---	1,217.9	1,386.6	691.7	2,078.3	256.7	6,339.2	6,595.9
Dec.-Feb.	6,595.9	---	0.2	6,596.1	158.0	---	1,126.3	1,284.3	649.4	1,933.7	252.3	4,410.1	4,662.4
Mar.-May	4,662.4	---	0.2	4,662.6	181.7	16.2	1,072.4	1,270.3	618.8	1,889.1	251.6	2,521.9	2,773.5
June-Aug.	2,773.5	---	0.5	2,774.0	189.4	4.0	740.5	933.9	448.0	1,381.9	241.8	1,150.3	1,392.1
Mkt. year	2,034.3	6,639.4	1.4	8,675.1	697.8	20.2	4,157.1	4,875.1	2,407.9	7,283.0	241.8	1,150.3	1,392.1
1981/82													
Sept.-Nov.	1,392.1	8,118.7	0.2	9,511.0	188.8	---	1,198.4	1,387.2	522.7	1,909.9	243.6	7,357.5	7,601.1
Dec.-Feb.	7,601.1	---	0.4	7,601.5	180.2	---	1,182.0	1,362.2	472.9	1,835.1	259.3	5,507.1	5,766.4
Mar.-May	5,766.4	---	0.2	5,766.6	201.9	16.0	1,069.6	1,287.5	599.0	1,886.5	269.7	3,610.4	3,880.1
June-Aug.	3,880.1	---	0.3	3,880.4	206.9	3.4	718.6	928.9	414.9	1,343.8	280.1	2,256.5	2,536.6
Mkt. year	1,392.1	8,118.7	1.1	9,511.9	777.8	19.4	4,168.6	4,965.8	2,009.5	6,975.3	280.1	2,256.5	2,536.6
1982/83													
Sept.-Nov.	2,536.6	8,235.1	0.3	10,772.0	217.5	---	1,202.0	1,419.5	446.2	1,865.7	372.0	8,534.3	8,906.3
Dec.-Feb.	8,906.3	---	0.1	8,906.4	201.6	---	1,293.6	1,495.2	512.0	2,007.2	470.8	6,428.4	6,899.2
Mar.-May	6,899.2	---	0.2	6,899.4	226.6	11.6	1,258.3	1,496.5	479.0	1,975.5	491.7	4,432.2	4,923.9
June-Aug.	4,923.9	---	0.1	4,924.0	234.6	2.9	766.8	1,004.3	396.6	1,400.9	1,142.7	2,380.4	3,523.1
Mkt. year	2,536.6	8,235.1	0.7	10,772.4	880.3	14.5	4,520.7	5,415.5	1,833.8	7,249.3	1,142.7	2,380.4	3,523.1
1983/84													
Sept.-Nov.	3,523.1	4,174.7	0.5	7,698.3	238.6	---	1,311.0	1,549.6	497.0	2,046.6	1,227.0	4,424.7	5,651.7
Dec.-Feb.	5,651.7	---	0.6	5,652.3	222.8	---	1,056.0	1,278.8	508.5	1,787.3	1,214.0	2,651.0	3,865.0
Mar.-May	3,865.0	---	1.0	3,866.0	247.3	16.6	939.7	1,203.6	517.3	1,720.9	195.0	1,950.1	2,145.1
June-Aug.	2,145.1	---	0.6	2,145.7	247.3	2.3	511.1	760.7	378.7	1,139.4	201.5	804.8	1,006.3
Mkt. year	3,523.1	4,174.7	2.7	7,700.5	956.0	18.9	3,817.8	4,792.7	1,901.5	6,694.2	201.5	804.8	1,006.3
1984/85													
Sept.-Nov.	1,006.3	7,674.0	0.9	8,681.2	249.7	---	1,294.2	1,543.9	506.2	2,050.1	206.7	6,424.4	6,631.1
Dec.-Feb.	6,631.1	---	0.4	6,631.5	241.5	---	1,182.9	1,424.4	583.9	2,008.3	209.7	4,413.5	4,623.2
Mar.-May	4,623.2	---	1.1	4,624.3	267.8	15.6	1,026.5	1,309.9	478.9	1,788.8	221.7	2,613.8	2,835.5
June-Aug.	2,835.5	---	1.1	2,836.6	276.2	3.8	612.0	892.0	296.4	1,188.4	224.9	1,423.3	1,648.2
Mkt. year	1,006.3	7,674.0	3.5	8,683.8	1,035.2	19.4	4,115.6	5,170.2	1,865.4	7,035.6	224.9	1,423.3	1,648.2
1985/86													
Sept.-Nov.	1,648.2	8,865.0	1.0	10,514.2	271.5	---	1,210.3	1,481.8	417.7	1,899.5	388.6	8,226.1	8,614.7
Dec.-Feb.	8,614.7	---	1.3	8,616.0	259.0	---	1,304.6	1,563.6	465.3	2,028.9	509.4	6,077.7	6,587.1
Mar.-May	6,587.1	---	1.9	6,589.0	286.5	15.4	1,094.1	1,396.0	204.4	1,600.4	550.9	4,437.7	4,988.6
June-Aug.	4,988.6	---	1.0	4,989.6	293.0	3.2	542.8	839.0	137.6	976.6	600.0	3,413.0	4,013.0
Mkt. year	1,648.2	8,865.0	5.2	10,518.4	1,110.0	18.6	4,151.8	5,280.4	1,225.0	6,505.4	600.0	3,413.0	4,013.0

1/ Includes quantity under loan and farmer-owned reserve.

Table 7.--Sorghum: Marketing year supply and disappearance, specified periods, 1975/76-1985/86

Year and periods beginning September 1	Supply				Disappearance						Ending stocks		
					Domestic use								
	Beginning stocks	Production	Imports	Total	Food, alcohol, and industrial	Seed	Feed and residual	Total	Exports	Total disappearance	Govt. owned	Privately owned 1/	Total
	Million bushels												
1975/76													
Sept.-May	65.3	754.4	0	819.7	6.9	1.6	477.4	485.9	179.8	665.7	0	154.0	154.0
June-Aug.	154.0	0	0	154.0	1.9	0.7	16.7	19.3	52.4	71.7	0	82.3	82.3
Mkt. year	65.3	754.4	0	819.7	8.8	2.3	494.1	505.2	232.2	737.4	0	82.3	82.3
1976/77													
Sept.-May	82.3	710.8	0	793.1	6.7	1.4	385.0	393.1	204.3	597.4	0.2	195.4	195.7
June-Aug.	195.7	0	0	195.7	1.9	0.6	26.2	28.7	49.7	78.4	0.2	117.1	117.3
Mkt. year	82.3	710.8	0	793.1	8.6	2.0	411.2	421.8	254.0	675.8	0.2	117.1	117.3
1977/78													
Sept.-May	117.3	780.9	0	898.2	7.1	1.4	393.7	402.2	176.9	579.1	0.3	318.8	319.1
June-Aug.	319.1	0	0	319.1	2.3	0.6	53.8	56.7	46.0	102.7	5.0	211.4	216.4
Mkt. year	117.3	780.9	0	898.2	9.4	2.0	447.5	458.9	222.9	681.8	5.0	211.4	216.4
1978/79													
Sept.-May	216.4	731.3	0	947.7	7.7	1.3	465.9	474.9	150.6	625.5	42.8	279.4	322.2
June-Aug.	322.2	0	0	322.2	2.3	0.5	72.0	74.8	39.5	114.3	43.7	164.2	207.9
Mkt. year	216.4	731.3	0	947.7	10.0	1.8	537.9	549.7	190.1	739.8	43.7	164.2	207.9
1979/80													
Sept.-May	207.9	807.4	0	1,015.3	8.3	1.4	460.8	470.5	267.2	737.7	45.6	232.0	277.6
June-Aug.	277.6	0	0	277.6	2.1	0.6	34.6	37.3	62.4	99.7	43.7	164.2	177.9
Mkt. year	207.9	807.4	0	1,015.3	10.4	2.0	495.4	507.8	329.6	837.4	43.7	164.2	177.9
1980/81													
Sept.-May	177.9	579.3	0	757.2	7.2	1.4	352.6	361.2	211.5	572.7	43.8	140.7	184.5
June-Aug.	184.5	0	0	184.5	1.9	0.6	-29.9	-27.4	81.6	54.2	41.5	88.8	130.3
Mkt. year	177.9	579.3	0	757.2	9.1	2.0	322.7	333.8	293.1	626.9	41.5	88.8	130.3

Continued--

Table 7.--Sorghum: Marketing year supply and disappearance, specified periods, 1975/76-1985/86--continued

Year and periods beginning September 1	Supply				Disappearance						Ending stocks		
					Domestic use								
	Beginning stocks	Production	Imports	Total	Food, alcohol, and industrial	Seed	Feed and residual	Total	Exports	Total disappearance	Govt. owned	Privately owned 1/	Total
	Million bushels												
1981/82													
Sept.-May	130.3	875.8	0	1,006.1	6.8	1.4	413.5	421.7	204.9	626.6	38.3	341.2	379.5
June-Aug.	379.5	0	0	379.5	2.0	0.6	3.5	6.1	54.8	60.9	41.8	276.8	318.6
Mkt. year	130.3	875.8	0	1,006.1	8.8	2.0	417.0	427.8	259.7	687.5	41.8	276.8	318.6
1982/83													
Sept.-May	318.6	835.1	0	1,153.7	6.0	0.9	453.5	460.4	164.2	642.6	54.0	475.1	529.1
June-Aug.	529.1	0	0	529.1	1.9	0.9	41.3	44.1	45.9	90.0	171.5	267.6	439.1
Mkt. year	318.6	835.1	0	1,153.7	7.9	1.8	494.8	504.5	210.1	714.6	171.5	267.6	439.1
1983/84													
Sept.-May	439.1	487.5	0	926.6	5.7	1.0	356.6	363.3	194.4	557.7	78.0	290.9	368.9
June-Aug.	368.9	0	0.1	369.0	2.0	1.1	28.3	31.4	50.2	81.6	102.8	184.6	287.4
Mkt. year	439.1	487.5	0.1	926.7	7.7	2.1	384.9	394.7	244.6	639.3	102.8	184.6	287.4
1984/85													
Sept.-May	287.4	866.2	0.1	1,153.7	12.4	1.8	541.9	556.1	236.8	792.9	111.1	249.7	360.8
June-Aug.	360.8	0	0	360.8	2.9	0.7	-3.1	0.5	60.1	60.6	112.1	188.1	300.2
Mkt. year	287.4	866.2	0.1	1,153.7	15.3	2.5	538.8	556.6	296.9	853.5	112.1	188.1	300.2
1985/86													
Sept.-May	300.2	1,112.6	0	1,412.8	23.0	1.8	636.0	660.8	140.2	801.0	181.4	430.4	611.8
June-Aug.	611.8	0	0	611.8	4.2	0.7	14.0	18.9	34.8	53.7	225.0	333.1	558.1
Mkt. year	300.2	1,112.6	0	1,412.8	27.2	2.5	650.0	679.7	175.0	854.7	225.0	333.1	558.1

1/ Includes quantity under loan and farmer-owned reserve.

Table 8.—Average prices received by farmers, United States, by months, 1980-86

Item and year beginning September 1	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr	May	June	July	Aug.	Average weighted by sales 1/
						Dollars per bushel							
Corn													
1980	3.01	2.99	3.10	3.19	3.19	3.22	3.25	3.24	3.24	3.17	3.14	2.87	3.11
1981	2.55	2.45	2.34	2.39	2.54	2.44	2.46	2.55	2.60	2.57	2.50	2.30	2.50
1982	2.15	1.98	2.13	2.26	2.36	2.56	2.71	2.95	3.03	3.04	3.13	3.35	2.68
1983	3.32	3.15	3.17	3.15	3.15	3.11	3.21	3.32	3.34	3.36	3.30	3.12	3.25
1984	2.90	2.65	2.55	2.56	2.64	2.62	2.67	2.70	2.68	2.64	2.60	2.44	2.62
1985	2.29	2.11	2.21	2.29	2.33	2.32	2.29	2.29	2.39	2.32	*1.99		2.35
						Dollars per cwt							
Sorghum													
1980	5.12	5.36	5.48	5.49	5.48	5.33	5.17	5.25	5.16	5.03	4.84	4.55	5.25
1981	4.07	3.90	3.87	3.95	4.09	4.08	4.00	4.10	4.35	4.17	3.96	3.95	4.25
1982	3.80	3.70	3.78	3.97	4.09	4.42	4.67	4.92	5.05	5.05	5.03	5.29	4.50
1983	5.26	5.01	4.98	4.93	4.92	4.74	4.85	5.00	5.08	4.94	4.64	4.59	5.07
1984	4.24	4.05	4.04	4.15	4.16	4.10	4.24	4.46	4.54	4.52	4.04	3.84	4.27
1985	3.27	3.30	3.47	3.76	3.68	3.55	3.67	3.80	3.98	3.39	*3.18		3.84

Item and year beginning June 1	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	Average weighted by sales 1/
						Dollars per bushel							
Oats													
1980	1.48	1.50	1.53	1.63	1.65	1.84	1.92	1.98	2.01	2.08	2.05	2.05	1.79
1981	1.99	1.84	1.72	1.74	1.78	1.88	1.94	1.97	1.99	2.02	1.99	1.99	1.89
1982	1.88	1.57	1.39	1.35	1.32	1.40	1.44	1.46	1.48	1.49	1.54	1.54	1.49
1983	1.51	1.46	1.45	1.55	1.62	1.67	1.73	1.81	1.88	1.81	1.82	1.84	1.67
1984	1.80	1.68	1.62	1.60	1.69	1.64	1.72	1.74	1.69	1.68	1.68	1.60	1.69
1985	1.59	1.31	1.16	1.10	1.08	1.14	1.20	1.18	1.16	1.14	1.14	1.21	1.25
1986	1.10	*.92											
Barley													
1980	2.36	2.52	2.59	2.65	2.81	2.90	2.97	3.09	3.05	3.04	3.04	3.00	2.84
1981	2.94	2.41	2.37	2.44	2.38	2.49	2.48	2.50	2.40	2.40	2.42	2.53	2.44
1982	2.39	2.16	2.20	2.17	1.98	2.06	2.19	2.16	2.00	2.09	2.22	2.36	2.22
1983	2.32	2.20	2.34	2.46	2.53	2.55	2.55	2.55	2.47	2.50	2.54	2.78	2.50
1984	2.61	2.54	2.26	2.25	2.29	2.25	2.19	2.24	2.21	2.18	2.16	2.23	2.26
1985	2.14	2.08	1.98	1.88	1.96	2.03	2.07	2.04	1.95	1.88	1.85	1.74	2.00
1986	1.57	*1.40											

Item and year beginning May 1	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	Average weighted by sales
						Dollars per ton							
Hay (mid-month)													
1980	69.30	65.10	67.00	67.20	71.90	77.20	75.00	74.80	72.80	72.50	69.80	68.20	71.00
1981	75.30	66.90	64.00	63.90	62.70	64.80	65.40	65.70	67.90	69.90	69.50	73.30	67.30
1982	77.50	69.60	66.10	65.00	66.80	67.10	68.70	68.60	70.30	73.20	69.90	74.00	69.30
1983	78.10	72.70	71.20	71.20	74.70	76.80	75.10	76.70	76.60	78.70	79.40	79.80	75.80
1984	82.50	76.10	72.40	70.40	70.70	73.10	71.40	73.40	73.00	73.10	72.20	72.50	72.70
1985	77.00	72.10	67.90	66.70	66.90	66.00	66.00	67.20	67.80	67.30	68.00	69.20	68.50
1986	70.90	62.40	58.70										

1/ Includes an allowance for unredeemed loans and purchase agreement deliveries valued at the average loan rate, by States; excludes Government payments. *Preliminary.

Source: Agricultural Prices, Agricultural Statistics Board, USDA.

Table 9.--Cash prices at principal markets, 1980-86

Item and year beginning September 1	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Simple average
						Dollars per bushel							
CORN No. 2 Yellow, St. Louis													
1980	3.26	3.35	3.53	3.59	3.60	3.47	3.42	3.49	3.42	3.33	3.34	3.03	3.40
1981	2.61	2.53	2.59	2.54	2.65	2.61	2.66	2.78	2.78	2.75	2.68	2.42	2.63
1982	2.32	2.12	2.43	2.49	2.52	2.79	2.99	3.24	3.24	3.27	3.39	3.68	2.87
1983	3.60	3.50	3.53	3.45	3.41	3.31	3.55	3.61	3.58	3.57	3.43	3.33	3.49
1984	3.09	2.84	2.77	2.75	2.86	2.84	2.86	2.88	2.81	2.79	2.72	2.47	2.81
1985	2.38	2.27	2.50	2.59	2.55	2.50	2.42	2.46	2.56	2.52	2.01		
CORN No. 2 Yellow, Omaha													
1980	3.01	3.16	3.34	3.30	3.29	3.18	3.17	3.24	3.24	3.19	3.15	2.79	3.17
1981	2.51	2.44	2.39	2.37	2.47	2.45	2.48	2.61	2.65	2.65	2.54	2.23	2.48
1982	2.23	2.12	2.35	2.37	2.42	2.62	2.82	3.09	3.10	3.11	3.18	3.39	2.73
1983	3.32	3.23	3.24	3.17	3.11	3.03	3.25	3.33	3.35	3.37	3.22	3.11	3.23
1984	2.94	2.71	2.61	2.55	2.60	2.61	2.68	2.73	2.68	2.70	2.61	2.39	2.65
1985	2.35	2.26	2.28	2.36	2.33	2.31	2.31	2.34	2.43	2.42	2.01		
SORGHUM No. 2 Yellow, Kansas City						Dollars per cwt							
1980	5.61	5.65	5.91	5.82	5.79	5.52	5.46	5.49	5.38	5.23	5.29	4.58	5.48
1981	4.16	4.14	4.14	4.27	4.44	4.26	4.28	4.45	4.48	4.50	4.38	4.02	4.29
1982	4.06	3.85	4.25	4.37	4.37	4.54	5.08	5.30	5.37	5.37	5.32	5.69	4.80
1983	5.55	5.37	5.25	5.16	5.09	5.03	5.40	5.36	5.39	5.40	4.95	4.74	5.22
1984	4.46	4.25	4.28	4.32	4.48	4.33	4.58	4.76	4.74	4.74	4.50	4.06	4.46
1985	3.56	3.62	3.75	3.97	3.95	3.80	3.82	4.00	4.25	4.00	3.20		

Item and year beginning June 1	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	Simple average
						Dollars per bushel							
OATS No. 2 Heavy, Minneapolis													
1980	1.67	1.80	1.70	1.86	1.96	2.15	2.16	2.20	2.25	2.23	2.21	2.23	2.04
1981	2.18	2.02	1.99	2.02	2.09	2.28	2.10	2.23	2.26	2.16	2.21	2.16	2.14
1982	2.12	1.87	1.53	1.51	1.51	1.67	1.67	1.67	1.63	1.63	1.73	1.71	1.69
1983	1.67	1.60	1.79	1.94	2.00	1.97	1.94	1.98	1.82	1.88	1.89	1.96	1.87
1984	1.92	1.84	1.77	1.79	1.84	1.92	1.87	1.81	1.82	1.79	1.73	1.65	1.81
1985	1.59	1.44	1.23	1.24	1.19	1.32	1.39	1.37	1.30	1.27	1.16	1.22	1.31
1986	1.18	1.05											
BARLEY No. 2 or Better Feed, Minneapolis													
1980	2.15	2.48	2.39	2.43	2.77	3.03	2.75	2.81	2.90	2.63	2.51	2.39	2.60
1981	2.09	2.26	2.35	2.21	2.26	2.31	2.06	2.20	2.27	2.16	2.16	2.24	2.21
1982	2.12	1.85	1.72	1.69	1.54	1.58	1.59	1.63	1.72	1.73	2.01	1.95	1.76
1983	1.96	1.95	2.42	2.61	2.60	2.53	2.39	2.55	2.56	2.65	2.74	2.77	2.48
1984	2.59	2.18	2.13	2.05	2.10	2.06	1.88	1.98	1.99	1.97	2.05	2.05	2.09
1985	1.90	1.66	1.46	1.40	1.41	1.49	1.60	1.57	---	---	---	1.31	1.53
1986	1.23	1.16											
BARLEY No. 3 or Better Malting, 65% or Better Plump, Minneapolis													
1980	2.99	3.36	3.27	3.63	3.80	3.88	3.77	3.75	3.83	3.71	3.84	3.80	3.64
1981	3.34	2.95	3.15	3.05	3.02	3.07	2.92	3.00	3.14	2.99	2.98	3.05	3.06
1982	2.93	2.63	2.48	2.37	2.42	2.45	2.37	2.38	2.42	2.45	2.68	2.76	2.53
1983	2.60	2.54	2.76	2.90	2.96	2.95	2.77	2.85	2.76	2.91	3.04	3.06	2.84
1984	3.04	2.86	2.48	2.44	2.43	2.43	2.36	2.46	2.47	2.51	2.52	2.55	2.55
1985	2.46	2.25	2.03	2.15	2.10	2.27	2.29	2.28	2.20	2.34	2.40	2.07	2.24
1986	1.84	1.75											

Source: Grain and Feed Market News, AMS, USDA.

Table 10.--Feed-price ratios for livestock, poultry, and milk, by months, 1980-86

Item and year beginning September 1	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Average
HOG/CORN, U.S. basis 1/													
1980	15.3	15.8	14.7	13.7	12.8	12.8	11.9	12.0	12.6	15.0	15.7	17.1	14.1
1981	19.1	18.4	17.7	16.3	17.1	19.8	19.8	20.1	21.8	22.4	23.1	26.6	20.2
1982	28.5	28.2	24.6	23.7	23.4	21.9	18.6	15.9	15.1	14.4	13.9	13.9	20.2
1983	13.3	12.8	11.8	14.0	15.4	14.6	14.3	14.3	14.1	14.6	15.8	16.2	14.3
1984	16.0	16.5	18.4	19.0	18.2	18.4	16.3	15.3	15.4	16.9	17.6	17.4	17.1
1985 2/	17.3	20.4	19.5	19.8	19.0	18.4	17.6	17.3	*	*	29.3		
BEEF-STEER/CORN, Omaha 3/													
1980	23.1	21.3	19.5	19.5	19.1	19.3	19.4	20.0	20.6	21.4	21.5	23.8	20.7
1981	26.0	25.2	25.0	25.0	24.6	25.9	26.5	26.5	27.2	26.5	26.1	29.2	26.1
1982	27.5	27.7	25.1	25.2	24.5	23.4	22.7	21.9	21.8	21.2	19.6	18.1	23.2
1983	17.8	18.4	18.3	19.8	21.6	22.1	21.1	20.4	19.7	19.1	20.4	20.7	20.0
1984	21.3	22.4	24.6	25.6	24.8	24.1	22.2	21.5	21.5	21.0	20.4	21.7	22.6
1985 2/	21.8	25.7	27.8	26.7	25.6	24.4	24.0	22.9	23.0	22.3	28.9		
MILK/FEED, U.S. basis 4/													
1980	1.40	1.43	1.40	1.39	1.39	1.39	1.41	1.39	1.35	1.36	1.40	1.43	1.40
1981	1.48	1.53	1.56	1.54	1.55	1.53	1.53	1.51	1.46	1.47	1.47	1.50	1.51
1982	1.57	1.61	1.62	1.60	1.59	1.56	1.55	1.49	1.45	1.43	1.45	1.41	1.53
1983	1.36	1.39	1.36	1.34	1.33	1.33	1.34	1.32	1.32	1.32	1.35	1.40	1.35
1984	1.48	1.56	1.62	1.59	1.57	1.57	1.55	1.51	1.47	1.45	1.44	1.47	1.52
1985 2/	1.51	1.56	1.55	1.53	1.52	1.50	*	1.46	*	*	1.50		
EGG/FEED, U.S. basis 5/													
1980	6.2	5.7	6.0	6.6	5.9	5.7	5.6	5.9	5.2	5.2	5.5	5.8	5.8
1981	6.4	6.5	7.2	6.7	6.6	6.8	7.1	6.6	5.6	5.3	5.7	5.4	6.3
1982	6.0	6.3	6.3	6.0	5.7	5.8	6.1	5.8	6.0	5.8	5.7	6.1	6.0
1983	6.0	6.2	6.9	7.7	8.8	8.5	7.4	8.6	6.5	5.8	5.8	5.8	7.0
1984	5.9	5.7	6.5	6.3	5.4	5.6	6.3	5.7	5.5	5.9	5.8	6.5	5.9
1985 2/	7.1	7.3	7.5	7.4	7.2	6.9	*	6.5	*	*	6.8		
BROILER/FEED, U.S. basis 6/													
1980	2.9	2.8	2.5	2.5	2.6	2.6	2.6	2.3	2.4	2.6	2.6	2.5	2.6
1981	2.4	2.4	2.4	2.3	2.6	2.6	2.6	2.5	2.6	2.7	2.6	2.5	2.5
1982	2.6	2.5	2.5	2.5	2.6	2.7	2.4	2.3	2.4	2.6	2.8	2.8	2.6
1983	2.7	2.5	2.8	2.9	3.1	3.1	3.1	2.7	2.7	2.7	3.0	2.7	2.8
1984	2.8	2.6	2.8	2.7	2.9	2.9	2.8	2.8	3.1	3.2	3.1	3.1	2.9
1985 2/	3.2	3.1	3.5	3.2	3.2	3.1	*	3.2	*	*	4.5		
TURKEY/FEED, U.S. basis 7/													
1980	3.7	4.0	3.9	3.5	3.1	3.1	3.2	3.0	3.1	3.3	3.3	3.2	3.4
1981	3.1	2.8	3.1	2.9	3.0	3.0	3.0	3.0	3.0	3.2	3.4	3.5	3.1
1982	3.8	3.9	3.9	3.0	2.9	2.9	2.9	2.7	2.9	3.0	2.8	2.8	3.1
1983	3.0	3.0	3.1	3.5	3.6	3.2	3.3	3.3	3.3	3.3	3.6	3.8	3.3
1984	3.9	4.4	5.0	5.5	4.7	3.8	3.7	3.7	3.7	3.8	4.2	4.5	4.2
1985 2/	5.0	5.5	5.5	5.5	3.4	3.5	*	3.5	*	*	4.5		

1/ Bushels of corn equal in value to 100 pounds of hog, live weight. 2/ Preliminary. 3/ Based on price of choice beef-steers, 900-1,100 pounds. 4/ Pounds of 16 percent mixed dairy feed equal in value to 1 pound whole milk. 5/ Pounds of laying feed equal in value to 1 dozen eggs. 6/ Pounds of broiler grower feed equal in value to 1 pound broiler, live weight. 7/ Pounds of turkey grower feed equal in value to 1 pound turkey, live weight. *=Beginning March 1986 data reporting shifted from monthly to quarterly.

Source: Agricultural Prices, Agricultural Statistics Board, USDA.

Table 11.--Price trends, selected feeds, and corn products

Item	Unit	Oct.-Sept. 1984/85 1/	1986						
			Jan.	Feb.	Mar.	Apr.	May	June	July
WHOLESALE, MOSTLY BULK 2/									
Soybean meal, 44% solvent, Decatur	$/ton	125	153	152	164	157	158	159	161
Soybean meal, high protein, Decatur	"	136	162	162	175	168	169	170	174
Cottonseed meal, 41% solvent, Memphis	"	99	146	129	116	129	134	132	137
Linseed meal, 34% solvent, Minneapolis	"	88	124	122	119	123	120	120	113
Meat and bone meal, Kansas City	"	150	169	153	160	150	171	175	173
Fishmeal, 65% protein, East Coast	"	264	291	288	320	290	287	273	278
Corn Gluten feed, Illinois pts.	"	73	92	90	97	96	90	88	84
Corn Gluten meal, 60% protein, Illinois pts.	"	203	219	208	199	193	211	217	212
Brewers' dried grains, Milwaukee	"	64	106	72	58	82	79	67	61
Distillers' dried grain, Lawrenceburg, Ky.	"	94	115	114	110	112	112	110	102
Feather meal, Arkansas Pts.	"	133	153	125	136	127	133	147	147
Wheat bran, Kansas City	"	66	64	54	62	72	60	53	33
Wheat middlings, Kansas City	"	66	64	54	62	72	60	53	33
Rice bran, f.o.b. mills, Arkansas	"	58	85	69	51	47	28	28	14
Hominy feed, Illinois pts.	"	79	85	85	85	86	85	83	72
Alfalfa meal, dehy., Kansas City	"	99	98	98	99	104	100	92	80
Cane molasses, New Orleans	"	48	65	66	69	71	74	79	79
Molasses beet pulp, Los Angeles	"	117	119	121	119	111	105	100	97
Animal fat, Kansas City	c/lb.	15.5	11.8	11.1	8.8	8.0	7.9	7.2	7.8
Urea, 42% N., Fort Worth	$/ton	222	220	220	214	214	214	214	214
Corn, No. 2 white, Kansas City	$/bu.	3.27	2.50	2.45	2.45	2.60	2.70	2.68	2.48
PRICES PAID, U.S. BASIS 3/									
Soybean meal, 44%	$/cwt.	10.68	10.90	11.10	*	11.40	*	*	11.50
Cottonseed meal, 41%	"	12.19	11.30	11.80	*	11.90	*	*	11.80
Wheat bran	"	9.67	9.43	9.43	*	9.28	*	*	9.28
Wheat middlings	"	9.04	8.67	8.53	*	8.71	*	*	8.26
Broiler grower feed	$/ton	207	191	189	*	189	*	*	190
Laying feed	"	185	181	179	*	177	*	*	172
Turkey grower feed	"	216	209	211	*	215	*	*	221
Chick starter	"	206	190	191	*	191	*	*	186
Dairy feed, 16%	"	172	169						
Beef cattle concentrate, 32-36% protein	$/cwt.	10.74	10.70	10.60	*	10.80	*	*	10.90
Hog concentrate, 38-42% protein	"	12.46	13.00	13.00	*	13.10	*	*	13.20
Stock salt	"	6.44	6.45	6.52	*	6.50	*	*	6.53
CORN PRODUCTS, WHOLESALE 4/									
Corn meal, New York									
White	$/cwt.	16.94	17.88	17.63	17.53	17.47	N.Q.	N.Q.	N.Q.
Yellow	"	13.01	12.63	12.43	12.53	12.47	12.83	12.98	12.70
Grits (brewers'), Chicago	"	10.24	9.65	9.44	9.54	9.48	9.84	10.00	9.71
Syrup, Chicago West	c/lb.	11.10	9.18	9.18	9.18	9.18	8.36	8.16	8.16
Sugar (dextrose), Chicago West	"	21.93	22.00	22.00	22.00	22.00	22.00	22.00	22.00
High-fructose (dried weight in tank cars), Chicago West	"	18.80	12.00	12.00	12.00	12.00	12.00	12.69	13.55
Corn starch, f.o.b. Midwest	$/cwt.	11.24	9.22	9.44	9.56	9.50	9.52	9.75	9.89

1/ Preliminary. 2/ Grain and Feed Market News, AMS, USDA, except urea which is from Feedstuffs, Miller Publishing Co., Minneapolis, Minnesota. 3/ Agricultural Prices, Agricultural Statistics Board, USDA. 4/ Milling and Baking News, Kansas City, Missouri, except starch which is from industry sources. *=Beginning March 1986 data reporting shifted from monthly to quarterly. N.Q.=no quotes.

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